

# Subject Index

## Volume 59

Absorptiometry, dual-energy x-ray. *See* Dual-energy x-ray absorptiometry  
Absorption. *See* Intestinal absorption  
Abstracts, First International Conference on Dietary Assessment Methods, oral and poster presentations, 281S  
Acyl CoA:cholesterol acyltransferase, dietary citrus pectin and (guinea pig), 869  
Additives, exposure to, food-intake surveys in estimation of, 240S  
Adipose tissue  
distribution in obesity, magnetic resonance imaging, 1277  
 $\alpha$ -tocopherol/ $\gamma$ -tocopherol ratio,  $\alpha$ -tocopherol supplementation and, 1025  
Adiposity, in elderly women, underreporting of energy intake and, 1286  
Adolescence  
diabetes mellitus, glycemic effect and satiating capacity of potato chips and milk chocolate bars in, 792S  
obesity, 955  
criteria for overweight in adolescent preventive services, 307  
pregnancy, iron status assessment, 502S  
African Americans  
diet and coronary heart disease risk factors in, 103  
smoking and serum nutrient concentrations in African-American women, 891  
Age/aging. *See* Geriatric population  
Alcohol ingestion  
postmeal fat storage and, 619  
relation to hyperinsulinemia in South Asian and European men, 1069  
resting energy expenditure and, 805  
Almonds, dietary intake, effects on plasma cholesterol and LDL cholesterol, 995  
Amino acids. *See also* specific amino acids  
indispensable  
kinetics, dietary nonspecific nitrogen and, 1347  
tracer-derived estimates of leucine balance, 1000  
tracer-derived estimates of leucine requirements, 1000  
kinetics, response to enteral and intravenous feeding, 1395  
losses, contribution of gastrointestinal amino acid losses to maintenance requirements, 70  
requirements  
contribution of gastrointestinal amino acid losses to maintenance requirements, 70  
MIT values, effect of dietary nonspecific nitrogen, 1347  
plant protein foods, 1203S  
Amino acid score, plant protein foods, 1203S  
Amylose  
in carbohydrate foods, effect on digestion and absorption, 699S  
postprandial glycemic and insulinemic response to food, effect of food matrix, 784S  
Amylose-amylopectin ratio, influence on glucose and insulin responses to barley products, 1075  
Anemia  
iron-deficiency. *See* Iron-deficiency anemia  
in pregnancy, 492S  
Animal protein, chronic degenerative disease and diet, 1153S  
Anorexia nervosa, protein repletion during nutritional rehabilitation in, 98  
Anthropometry  
body composition of cystic fibrosis children, 123  
criteria for overweight in adolescent preventive services, 307  
undernutrition and disease in elderly population, 317  
Antibody response, to tetanus toxoid, in vitamin A deficiency, lipopolysaccharide- and tumor necrosis factor- $\alpha$ -induced enhancement (rat), 922  
Antimutagens, cancer preventive properties of *Brassica* spp, 1166S  
Antinutrients, lente (low glycemic index) carbohydrate foods, postprandial insulin and glucose responses, 706S  
Antioxidants  
 $\beta$ -carotene supplementation and lipid peroxidation in smokers, 884  
diet and coronary heart disease, 1117S  
dietary vitamin C intake and pulmonary function, 110  
prophylactic vitamin C: misplaced zeal (*letter*), 131  
Apolipoprotein(s), plasma, in elderly population, relation to dietary intake, 32  
Apolipoprotein B  
low-density-lipoprotein, effects of dietary rapeseed oil with/without squalene, 356  
plasma, whole vs skim milk consumption and, 612  
serum, food frequency and, 706S  
Apolipoprotein B/E receptor, dietary citrus pectin and (guinea pig), 869  
Appetite, carbohydrate intake and, 728S  
Ascorbic acid. *See also* Vitamin C  
iron bioavailability and, 1381  
Aspartame, effects on motivational ratings, taste preferences, and energy intakes, sucrose vs, 338  
Atherosclerosis, triglyceride-rich lipoproteins and, 795  
Attenuation factor, food-frequency questionnaire, semiquantitative, 262S  
Autocorrelation analysis, basal metabolic rate and dietary energy intake of Columbian women, 20  
Bacteria, dental caries and, 719S, 788S  
Barley, dietary  
postprandial glucose and insulin responses, effect of food structure and amylose-amylopectin ratio, 1075  
postprandial glycemic response to bread containing intact kernels vs milled flour, 779S  
rate of digestion of products prepared from different types of barley flour, 780S  
sterol excretion by ileostomy subjects and, 785S  
Beet fiber, dietary intake, sterol excretion by ileostomy subjects and, 785S  
Bias  
dietary data analysis, relationship between data collection methodology and analysis methodology, 253S  
in multicenter cohort studies on diet and cancer, calibration approach to, 245S  
*Bifidobacterium bifidum*. *See* Lactic acid bacteria  
*Bifidobacterium longum*, dietary enrichment, effect on colonic microbiology and fecal metabolites, 428  
Bile, sterols in, in vegetarians, cholesterol feeding and, 1325  
Bile acids  
excretion by ileostomy subjects  
effect of dietary cholesterol, 48  
effect of dietary fiber, 785S  
effect of psyllium husk and seed, 395

effect of rye bran, 389  
 fecal excretion, effect of consumption of *Bifidobacterium longum*-enriched yogurt, 428  
 in vegetarians, cholesterol feeding and, 1325

**Bioelectrical impedance analysis (BIA)**  
 body composition assessment in malnourished subjects with Crohn's disease, 325  
 body composition of malnourished children after dietary supplementation, 5  
 operational equivalence between segmental and whole-body bioelectrical impedance in renal patients (*letter*), 675  
 predictive accuracy in estimating body composition of Native American women, 964  
 total body water in pregnancy, 578

**Biopsy**, adipose tissue needle biopsy, tocopherol kinetics after  $\alpha$ -tocopherol supplementation, 1025

**Biotechnology**, plant foods, 1255S

**Birth weight**  
 effect on subsequent obesity, 955  
 healthy Seventh-day Adventist lifestyle and, 1124S  
 low, maternal iron-deficiency anemia and, 492S  
 prediction, in gestational diabetes, 1409

**Bleeding time**, relationship to diet and plasma fatty acid composition of Alaskan Eskimos, 384

**Blood donation**, iron stores and iron absorption, 1376

**Blood pressure**  
 diet and, 1130S  
 in African Americans, 103  
 dietary fiber and, 1242S  
 healthy Seventh-day Adventist lifestyle and risk of disease, 1124S  
 immune milk and, 929

**Body builder**. *See* Strength training

**Body composition**  
 assessment in malnourished subjects with Crohn's disease, 325  
 body fat and FFM in adults, dual-energy x-ray absorptiometry vs densitometry vs total body water, 547  
 cystic fibrosis children, 123  
 effect of pyruvate supplementation in hyperlipidemic subjects on low-cholesterol, low-fat diet, 423  
 effect of weight loss and restoration in anorexia nervosa, 98  
 endurance exercise, resistance training, and very-low-energy diet in obesity and, 1088  
 lipoprotein response to low-fat, high-carbohydrate diet plus exercise training in glucose intolerance, 820  
 of malnourished children, effects of high-protein diet, 5  
 Native American women, predictive accuracy of bioelectrical impedance, 964  
 obesity as adaptation to high-fat diet, 350  
 weight cycling and (rat), 560

**Body fat**  
 after refeeding in anorexia nervosa, 98  
 carbohydrate intake and, 682S  
 cystic fibrosis children, 123  
 gain, gestational weight gain and, 439S  
 measurement, dual-energy x-ray absorptiometry vs densitometry vs total body water, 547  
 Native American women, predictive accuracy of bioelectrical impedance, 964

**Body mass index**  
 bone mineral density in elderly female lactoovo-vegetarians vs omnivores, 1197S  
 criteria for overweight in adolescent preventive services, 307  
 predictive values of childhood body mass index for overweight in adulthood, 810  
 prepregnancy, prediction of infant birth weight in gestational diabetes, 1409  
 relation to plasma lipid concentrations in elderly, 32

**Body temperature**, nocturnal, restricted energy intake and, 346

**Body water**, total  
 assessment, in malnourished subjects with Crohn's disease, 325  
 body composition measurement, densitometry and dual-energy x-ray absorptiometry vs, 547  
 cystic fibrosis children, 123  
 in pregnancy, bioelectrical impedance analysis, 578

**Body weight**  
 effect of lactation on resting metabolic rate and, 42  
 energy balance and, 682S  
 restoration in anorexia nervosa, 98

**Bone**  
 calcium mobilization from, during lactation, 593  
 chronological changes in zinc concentrations during dietary zinc deprivation (pig), 649  
 bone mineral content, elderly female lactoovo-vegetarians vs omnivores, 1197S

**Bone mineral density**  
 in phenylketonuric children, 419  
 radial, elderly female lactoovo-vegetarians vs omnivores, 1197S  
 restrained eating and ovulatory disturbances and, 92  
 in vegetarians, 1238S

**Book reviews**  
*Annual Review of Nutrition*, vol 12, RE Olson, DM Bier & DB McCormick (eds.), 435  
*Clinical Nutrition of the Young Child*, O Brunner, FR Carrazza, M Gracey, BL Nichols & J Senterre, 134  
*Communication Strategies to Support Infant and Young Child Nutrition*, P Koniz-Booher, 1420  
*Dietary Fat Requirements in Health and Development*, J Beare-Rogers (ed.), 677  
*Health Effects of Dietary Fatty Acids*, GJ Nelson, 1420  
*Introduction to Nutrition, Exercise, and Health* (4th ed), FI Katch & WD McArdle (eds.), 134  
*McCance & Widdowson: A Scientific Partnership of 60 Years*, M Ashwell (ed.), 1096  
*Medical and Nutritional Complications of Alcoholism: Mechanisms and Management*, CS Loeber, 1096  
*New Technologies and the Future of Food and Nutrition: Proceedings of the First Ceres Conference*, GE Gaull & RA Goldberg (eds.), 952  
*Nutrient Modulation of the Immune Response*, S Cunningham-Rundles (ed.), 677  
*Nutrition for Developing Countries* (2nd ed), FS King & A Burgess, 952  
*Nutrition in the Elderly: The Boston Nutritional Status Survey*, SC Hartz, RM Russell & IH Rosenberg (eds.), 134  
*RAP: Rapid Assessment Procedures, Qualitative Methodologies for Planning and Evaluation of Health Related Programmes*, NS Scrimshaw & GR Gleason (eds.), 135  
*Understanding Nutrition* (6th ed), EN Whitney & SR Rolfe, 435

**Bowel**, small. *See* Ileostomy subject

**Brain**, accretion of n-3 fatty acids, low-linolenic acid diet supplemented with docosahexaenoic acid (chick), 1338

**Brassica** spp, cancer preventive properties, 1166S

**Breast cancer**, diet and, dietary assessment in, 146S

**Breast-feeding**. *See* Infant nutrition; Milk, human

**Breast milk**. *See* Milk, human

**Breath ethane**, lipid peroxidation in smokers,  $\beta$ -carotene supplementation and, 884

**Breath hydrogen test**  
 effect of lactic acid bacteria on colonic fermentation and lactose malabsorption, 74

**lactose** digestion and tolerance in adult and elderly Asian-Americans, 1021  
 resistant starch and breath hydrogen excretion, 626

**Breath pentane**, lipid peroxidation in smokers,  $\beta$ -carotene supplementation and, 884

**Bronchopulmonary dysplasia**, in preterm infant, vitamin A supplementation of intravenous lipids in, 586

**Buccal mucosal cells**, carotenoids, tocopherols, and retinoids in, 636

**Calcium**  
 absorption  
 during lactation, 593  
 in vegetarians, 1238S  
 dietary intake  
 bone mineral density in elderly female lactoovo-vegetarians vs omnivores, 1197S  
 bone mineral density in phenylketonuric children and, 419  
 effect on nutrient consumption, plasma lipids, and lipoproteins, 900

recommendations, 1238S  
 requirements during pregnancy and lactation, 477S  
 mobilization from bone, during lactation, 593  
 status in lactating women on vegetarian diets, 1182S  
 supplementation, effect on nutrient consumption, plasma lipids, and lipoproteins, 900  
 in vegetarian diets, 1223S, 1238S

Calorimetry  
 indirect  
   energy metabolism in pregnancy, 827  
   fat oxidation in obesity, 350  
   metabolic effects of resistant starch, 879  
   total daily energy expenditure, physical activity, and obesity, 800  
   24-hour energy expenditure and substrate utilization in body builders, 10

whole-body, alcohol and postmeal fat storage, 619

Camposterol, in vegetarians, cholesterol feeding and, 1325

Cancer. *See also specific organs*  
 bias in multicenter cohort studies on diet and cancer, calibration approach to, 245S  
 diet and, 1162S  
 dietary fiber and, 1242S  
 incidence  
   California Seventh-day Adventist population, 1136S  
   healthy Seventh-day Adventist lifestyle and risk of disease, 1124S  
   prevention, cancer preventive properties of *Brassica* spp, 1166S  
   risk, micronutrient intake and, 1162S

Canola oil. *See* Rapeseed oil

Carbohydrate  
 absorption, 690S  
   food properties affecting, 699S  
 available, 679S  
 complex, 679S  
 dietary intake  
   dental health and, 719S  
   in diabetes, 742S  
   diet glycemic index, 1265  
   in elderly population, 773S  
   energy balance and, 682S  
   exercise performance and, 790S  
   fat intake and insulin sensitivity, 686S  
   glycemic index, satiety, and cholecystokinin response, 787S  
   implications of food-carbohydrate research on nutrition recommendations and product development, 770S  
   postexercise energy balance and, 975  
   postprandial thermogenesis, simple vs complex carbohydrate meal, 789S  
   satiation and, 728S  
   sterol excretion by ileostomy subjects and, 785S  
 digestion, 690S  
   food properties affecting, 699S  
 fermentable, dental caries and, 788S  
 healthfulness/nutritiousness of carbohydrate foods, 758S  
 in human milk, 600  
 lente (low glycemic index)  
   postprandial insulin and glucose responses, 706S  
   preexercise feeding and endurance performance, 791S  
 metabolism, thiamin deficiency and (rat), 1045  
 nutritional classification of food carbohydrates, 679S  
 oxidation, high-fat diet, 53  
 unavailable, 679S

Cardiovascular disease. *See also* Coronary heart disease  
 diet and, dietary assessment in, 146S  
 protective effects of dietary n-3 fatty acids, 1060  
 risk factors, insulin resistance and, 686S

Caries. *See* Dental caries

$\alpha$ -Carotene  
 serum, smoking and, 891  
 supplementation, plasma carotenoid concentration and, 896

$\beta$ -Carotene  
 prevention of x-ray-induced genetic damage in lymphocytes, 409  
 serum, smoking and, 891  
 supplementation  
   lipid peroxidation in smokers and, 884  
   plasma carotenoid concentration and, 896  
   plasma response of children, 1369

Carotenoids  
 in buccal mucosal cells, plasma intra- and interindividual variability and storage stability, 636  
 serum, carotenoid supplementation and, 896  
 serum levels, smoking and, 891

Case-control study, plasma homocysteine and early-onset coronary artery disease, 940

Catecholamines, postprandial response, high-fiber vs low-fiber meal, 1386

Cellulose, metabolic effects, 879

Chemoprevention, cancer preventive properties of *Brassica* spp, 1166S

Cholecalciferol, for increased parathyroid hormone secretion in elderly population, 1040

Cholecystokinin, glycemic index, satiety, and cholecystokinin response, 787S

Cholestanol, fecal excretion, in vegetarians, cholesterol feeding and, 1325

Cholesterol  
 dietary  
   cholesterol absorption and excretion in ileostomy subjects, 48  
   cholesterol metabolism in vegetarians and, 1325  
   citrus pectin plus, hepatic cholesterol homeostasis and (guinea pig), 869  
   excretion by ileostomy subjects  
     effect of dietary cholesterol, 48  
     effect of dietary fiber, 785S  
     effect of rye bran, 389  
   high-density-lipoprotein (HDL)  
     dietary monounsaturated rapeseed oil vs polyunsaturated sunflower oil in hyperlipidemia and, 667  
     effect of psyllium husk and seed, 395  
     response to exercise training and low-fat, high-carbohydrate diet in glucose intolerance, 820  
   low-density-lipoprotein (LDL)  
     dietary monounsaturated rapeseed oil vs polyunsaturated sunflower oil in hyperlipidemia and, 667  
     effects of diet supplementation with nuts, 995  
     food frequency and, 706S  
 metabolism  
   effects of dietary cholesterol, 1325  
   effects of dietary rapeseed oil with/without squalene, 356

plasma  
   animal protein and, 1153S  
   carbohydrate intake and, 710S  
   effects of dietary *trans* fatty acids, 861  
   effects of diet supplementation with nuts, 995  
   isamune milk and, 929  
   pyruvate and, in obese Zucker rats, 331

serum  
   diet and, 1117S  
     in African Americans, 103  
     dietary fiber and, 1242S  
     effect of dietary palmitic acid, 841  
     effect of dietary rapeseed oil with/without squalene, 356  
     effect of low-fat, high-fiber diet, 935  
     effect of psyllium husk and seed, 395  
     effect of stearic, palmitic, myristic, and lauric acids, 371  
     psyllium and, 395, 1055  
 total  
   healthy Seventh-day Adventist lifestyle and, 1124S  
   whole vs skim milk consumption and, 612

Cholesterol esters, serum, fatty acid composition of, adherence to fat-modified diet and, 364

Chylomicron(s), metabolism, 795

Citrus pectin. *See* Pectin

Coagulation  
   effects of low-fat, high-fiber diet, 935  
   effects of stearic, palmitic, myristic, and lauric acids, 371

Cobalamin. *See also* Vitamin B-12  
 deficiency, hyperhomocysteinemia and, redox status and protein binding of homocysteine in, 631

Coconut, dietary intake, effects on plasma cholesterol and LDL cholesterol, 995

Cognition, children's self-reports of food intake, 212S

Cognitive dietary restraint. *See* Restrained eating

Cohort studies, bias in multicenter cohort studies on diet and cancer, calibration approach to, 245S

Colon

- fermentation
  - effect of lactic acid bacteria, 74
  - polydextrose, 1362
  - resistant starch, 626, 879
- microbiology, effect of consumption of *Bifidobacterium longum*-enriched yogurt, 428

Colon cancer, resistant starch and, 626

Communication, cultural issues, 190S

Computer technology, meal- vs list-based methods of dietary assessment, 175S

Congenital anomaly, neural tube defect

- maternal diet and, 532S
- maternal folate supplementation and, 511S

Copper

- content and bioavailability in vegetarian diets, 1223S
- influence on selenium enzymes (rat), 654

Coronary artery disease

- linoleic acid and (*letter*), 949, 1418
- plasma homocysteine levels and, 940
- triglyceride-rich lipoproteins and atherosclerosis, 795

Coronary heart disease

- diet and, 1117S
- dietary fiber and, 1242S
- linoleic acid and (*letter*), 949, 1418
- plasma lipid, lipoprotein, and apolipoprotein concentrations in elderly population, relation to dietary intake, 32
- risk factors
  - in African Americans, diet and, 103
  - diet and hyperinsulinemia in South Asian and European men, 1069
  - effects of low-fat, high-fiber diet, 935
  - whole vs skim milk consumption and blood lipids, 612

Corticosterone, plasma, thiamin deficiency and (rat), 1045

C-peptide, postprandial response to vegetables in mixed meals, 793S

Creatinine, urinary iodine-creatinine ratio, evaluation of iodine status, 1415

Crohn's disease. *See also* Ileostomy subject

- malnutrition in, body composition assessment, 325

Cryptoxanthin, serum, smoking and, 891

Culture. *See* Ethnicity

Culture studies

- $\beta$ -carotene prevention of micronuclei in lymphocytes exposed to x-irradiation, 409
- fatty acid-mediated injury to vascular endothelium, glutathione redox cycle in (porcine), 60

Cysteine, redox status and protein binding, in hyperhomocysteinemia due to cobalamin deficiency, 631

Cysteinylglycine, redox status and protein binding, in hyperhomocysteinemia due to cobalamin deficiency, 631

Cystic fibrosis, body composition in, 123

Data analysis, relationship between data collection methodology and analysis methodology, 253S

Data pooling, methodologic issues, 251S

Deiodinase, copper and (rat), 654

Densitometry, body composition, total body water and dual-energy x-ray absorptiometry vs, 547

Dental caries

- carbohydrate intake and, 719S, 758S, 770S
- diet and, 788S

Deuterium dilution, body composition of cystic fibrosis children, 123

Diabetes mellitus

- adolescent, glycemic effect and satiating capacity of potato chips and milk chocolate bars in, 792S
- carbohydrate, fat, and insulin sensitivity, 686S
- carbohydrate intake in, 710S, 742S
- dietary fiber and, 1242S
- food-reportary grid, 201S
- fructose intake in, 753S
- gestational
  - modifying maternal fat intake in, 454S
  - prediction of infant birth weight, 1409
- glycemic index in, 747S
- insulin-dependent, nutritional consequences during pregnancy and lactation, 465S
- lipid loading, gastric emptying, and glycemia, 782S
- non-insulin-dependent
  - diet glycemic index, 1265
  - food structure and postprandial metabolism, 794S
  - insulin and glucagon secretion in, effects of vitamin D supplementation, 1083

Diet

- in African Americans, coronary heart disease risk factors and, 103
- bias in multicenter cohort studies on diet and cancer, calibration approach to, 245S
- blood pressure and, 1130S
- bone density in elderly female lactoovo vegetarians vs omnivores, 1197S
- carbohydrate, fat, and insulin sensitivity, 686S
- carbohydrate intake. *See also* Carbohydrate, dietary intake
  - importance of food-carbohydrate research on nutrition recommendations and product development, 770S
- chronic degenerative disease and, 1153S
- coronary heart disease and, 1117S
- dental caries and, 778S
- diabetic
  - carbohydrates in, 742S
  - fructose in, 753S
  - importance of glycemic index, 747S, 794S
  - digestibility and metabolizability of energy during pregnancy, 827
- disease and. *See* Disease, diet and
- diversity (*letter*), 950
- effect on immune function in elderly population, 572
- fat-modified, adherence to, fatty acid composition of serum cholesterol esters and erythrocyte and platelet membranes and, 364
- fatty acid composition, glucose and lipid metabolism and, 1310
- glycemic index, in diabetes mellitus, 1265
- high-calcium, effect on nutrient consumption, plasma lipids, and lipoproteins in hypertension, 900
- high-fat
  - adaptation to, 350
  - plasma nonesterified fatty acids and, 53
  - response of fat-to-carbohydrate oxidation ratio in obesity-prone subjects, 786S
- high-protein, effect on body composition of malnourished children, 5
- intervention studies, 185S
- iron fortification, 644
- lipid-lowering
  - monounsaturated rapeseed oil vs polyunsaturated sunflower oil, 667
  - monounsaturated vs polyunsaturated fatty acids, 115
- low-cholesterol, low-fat, pyruvate supplementation, effects on plasma lipids and body composition in hyperlipidemic subjects, 423
- low-fat, ad libitum complex-carbohydrate diet vs low-energy diet in obesity, 980
- low-fat, high-carbohydrate, exercise training plus, lipoprotein response in glucose intolerance, 820
- low-fat, high-fiber, effects on blood lipids, coagulation, and fibrinolysis, 935
- low-protein, low-phosphorus, insulin clearance in chronic renal failure, 663
- macrobiotic nutrition and child health, 1187S
- methodologic issues for pooling dietary data, 251S
- micronutrients and cancer, 1162S
- plasma lipoprotein profile of Myskoke Indians and, 847
- relationship to plasma fatty acid composition and bleeding times of Alaskan Eskimos, 384
- relation to hyperinsulinemia in South Asian and European men, 1069
- relation to plasma lipid concentrations in elderly, 32
- restricted energy intake, effects on nocturnal body temperature and sleep patterns, 346
- serum cholesterol and, 1117S

vegetarian. *See* Vegetarianism

very-low-energy

- cardiac response (rat), 566
- endurance exercise and weight training plus, in obesity, 1088
- zinc deprivation, chronological changes in zinc concentrations during (pig), 649

Dietary assessment methods

- assessing sensitivity to change in diet-intervention research, 185S
- calibration approach to bias in multicenter cohort studies on diet and cancer, 245S
- children's food records vs school-lunch observations, 218S
- children's self-reports of food intake, cognitive model, 212S
- collection of dietary supplement data, 232S
- culturally sensitive food-habit research, 190S
- data analysis, relationship between data collection methodology and analysis methodology, 253S
- eating patterns and nutrient intake of children, environmental influences on data collection methods, 207S
- food-frequency questionnaire, 171S
- design considerations for studies utilizing, 180S
- multicultural, 203S
- semiquantitative, statistical issues, 262S
- food-intake surveys in estimating exposure to nonnutrients, 240S
- food-repository grid, validation with diabetic population, 201S
- meal- vs list-based methodology, 175S
- methodologic issues for pooling dietary data, 251S
- multiple-day weighed record for estimating Senegalese children's food intakes during weaning, 266S
- national nutrition surveys in U.S., 164S
- need for improved methods in Eastern Europe, 273S
- NHANES III supplemental nutrition survey of older Americans, 224S
- nutritional research on disease causation, 146S
- nutrition surveys in Eastern Europe, 157S
- nutrition surveys in Western Europe, 161S
- policy-making issues

  - statement from World Health Organization, 271S
  - statement of Food and Agriculture Organization, 269S

- rationale for international conference series, 143S
- research needs, 168S
- research priorities and recommendations, 275S
- standardization, 157S
- validation

  - for culturally diverse populations, 198S
  - 24-hour urine nitrogen and energy expenditure, 227S
  - validity of methods used for elderly populations, 221S

Dietary restraint. *See* Restrained eating

Dietary supplements, data collection and misclassification of nutrient status, 232S

Dietary surveys. *See also* Nutrition surveys

- food-intake surveys in estimating exposure to nonnutrients, 240S
- maternal nutrition, 542S
- validation, 24-hour urine nitrogen and energy expenditure, 227S
- Western Europe, 161S

Diet history

- computerized, 175S
- of elderly subjects, 221S
- validation for culturally diverse populations, 198S

Dieting

- during lactation, milk production and, 833
- during pregnancy and lactation, 446S

Digestibility

- of energy during pregnancy, 827
- plant protein foods, 1203S

Digestion

- carbohydrate, 690S
- food properties affecting, 699S
- rate of digestion of products prepared from different types of barley flour, 780S
- starch, guar gum viscosity and, 914

Disaccharidase deficiency, 735S

Disaccharide maldigestion, 735S

Disease

- chronic
- nutritional consequences during pregnancy and lactation, 465S

vegetarianism and, 1171S

chronic degenerative disease and diet, 1153S

diet and, 146S

- analytic epidemiology studies, 180S
- lifestyle and, Seventh-day Adventists, 1124S
- nutrient/energy intake in elderly population and, 317

Docosahexaenoic acid

- dietary fish oil and plasma and tissue lipids in formula-fed infants (pig), 1317
- dietary supplementation, accretion of n-3 fatty acids in brain and retina and (chick), 1338

Doubly labeled water technique, energy expenditure

- obesity and, 800
- validation of dietary surveys, 227S

Drug therapy, vegetarianism and, 1171S

Dual-energy x-ray absorptiometry

- body composition assessment in malnourished subjects with Crohn's disease, 325
- body composition measurement, densitometry and total body water vs, 547
- bone mineral density in phenylketonuric children, 419

Eating behavior

- high-fat-diet challenge and, 786S
- restrained eating. *See* Restrained eating

Eating disorders, anorexia nervosa. *See* Anorexia nervosa

Eating patterns, of children, environmental influences on data collection methods, 207S

Economic issues, global impact of meat consumption, 1099S

Editorial

- with appreciation, 1
- reestablishment of a section on international nutrition in *AJCN*, 1263

EDTA (ethylenediaminetetraacetic acid), iron absorption from food, 644

Education. *See* Nutrition education

Eicosapentaenoic acid

- dietary fish oil and plasma and tissue lipids in formula-fed infants (pig), 1317
- plasma concentrations of Alaskan Eskimos, 384
- tissue concentration, dietary  $\alpha$ -linolenic acid and, 1304

Electroconductivity, total body (TOBEC), cystic fibrosis children, 123

Endothelial cells, barrier function, fatty acid-mediated damage, glutathione redox cycle in (porcine), 60

Endotoxin, glucose metabolic response to, thiamin deficiency and (rat), 1045

Energy, in human milk, 600

Energy balance

- carbohydrate intake and, 682S
- lipid-supplemented parenteral nutrition in neonates, 659
- postexercise, diet composition and, 975

Energy expenditure

- daily (24-hour)
  - effect of habitual exercise, 13
  - effect of strength training, 10
  - measurement in respiratory chamber, 775S
  - in pregnancy, 827
  - response of obesity-prone subjects to high-fat diet challenge, 786S
- iron supplementation in iron deficiency and, 908
- postexercise energy balance, diet composition and, 975
- resistant starch and, 879
- resting
  - alcohol ingestion and, 805
  - intragastric vs oral feeding, 971
- sleeping, measurement in respiratory chamber, 775S
- in smokers, 884
- total daily, obesity and, 800
- validation of dietary surveys, 227S
- variation in Columbian women during course of one year, 20

Energy intake

- dietary, variation in Columbian women during course of one year, 20
- digestibility and metabolizability of energy during pregnancy, 827
- effects of aspartame vs sucrose, 338
- in elderly population, 317
- underreporting of, 1286
- during lactation, 42, 446S, 833

postexercise energy balance and, 975  
 during pregnancy and lactation, 446S  
 requirements for term pregnancy, 439S  
 restricted  
     cardiac response to significant weight loss (rat), 566  
     effects on nocturnal body temperature and sleep patterns, 346  
     during lactation, milk production and, 833  
     24-hour, measurement in respiratory chamber, 775S  
     weight cycling and (rat), 560

Energy metabolism  
     effect of strength training, 10  
     during lactation, 42  
     during pregnancy, 439S, 827

Energy value, polydextrose, 1362

Environment, influence on dietary data collection in children, 207S

Environmental issues  
     environmental responsibility and livestock industry, 1110S  
     global impact of meat consumption, 1099S

Enzyme inhibitors, postprandial insulin and glucose responses to lente carbohydrates, 706S

Epidemiology  
     analytic studies of diet and disease, design considerations, 180S  
     bias in multicenter cohort studies on diet and cancer, calibration approach to, 245S  
     collection of dietary supplement data, 232S  
     culturally sensitive food-habit research, 190S  
     healthy Seventh-day Adventist lifestyle and risk of disease, 1124S  
     meal- vs list-based methods of dietary assessment, 175S  
     methodologic issues for pooling dietary data, 251S  
     validation of dietary assessment methods for culturally diverse populations, 198S

Errata, 1095

Erythrocyte(s)  
     membrane, fatty acid composition of, adherence to fat-modified diet and, 364  
     pyridoxal 5'-phosphate concentration, in lactating mothers and their infants, 1297

Erythrocyte aspartate transaminase stimulation test, in lactating mothers and their infants, 1297

Ethane. *See* Breath ethane

Ethnicity  
     culturally sensitive food-habit research, 190S  
     diet and hyperinsulinemia in South Asian and European men, 1069  
     lactose digestion and tolerance in adult and elderly Asian-Americans, 1021  
     multicultural food-frequency questionnaire, use with pregnant and lactating women, 203S  
     validation of dietary assessment methods for culturally diverse populations, 198S

Exercise  
     cycle ergometer exercise during lactation, effect on metabolic rate, 42  
     endurance exercise, resistance training, and very-low-energy diet in obesity, 1088  
     endurance performance  
         carbohydrate intake and, 790S  
         lente carbohydrate feeding and, 791S  
     energy balance after, diet composition and, 975  
     habitual, effect on daily energy expenditure and metabolic rate, 13  
     low-fat, high-carbohydrate diet plus, lipoprotein response in glucose intolerance, 820  
     during pregnancy and lactation, 446S  
     resting metabolic rate, preexercise resting data vs nonexercise control  
         day resting data, 28  
     strength training. *See* Strength training

Factor VII coagulant activity  
     effects of low-fat, high-fiber diet, 935  
     effects of stearic, palmitic, myristic, and lauric acids, 371

Fat  
     body. *See* Body fat  
     dietary  
         blood pressure and, 1130S  
         carbohydrate intake and insulin sensitivity, 686S  
         effects of *trans* fatty acids on plasma lipids and lipoproteins, 861

gastric emptying of pasta and impact on postprandial glycemia, 782S

gastric emptying rate, 781S  
     glucose and lipid metabolism and, 1310  
     hidden, 774S  
     influence on serum lipid response to n-3 fats, 1060  
     metabolic availability when ingested with carbohydrate, 53  
     monounsaturated rapeseed oil vs polyunsaturated sunflower oil in hyperlipidemia, 667  
     obesity as adaptation to high-fat diet, 350  
     postexercise energy balance and, 975

excretion by ileostomy subjects  
     effect of dietary fiber, 785S  
     effect of rye bran, 389  
     in human milk, 600

Fat-free mass (FFM)  
     cystic fibrosis children, 123  
     effect of strength training, 10

malnourished children, effects of high-protein diet, 5  
 malnourished subjects with Crohn's disease, 325

measurement, dual-energy x-ray absorptiometry vs densitometry vs total body water, 547

Native American women, predictive accuracy of bioelectrical impedance, 964

Fat oxidation  
     high-fat meal, 53  
     in obesity, 350  
     postprandial, high-fiber vs low-fiber meal, 1386

Fatty acids  
     *cis*, effects on plasma lipids and lipoproteins, 861  
     composition of serum cholesterol esters and erythrocyte and platelet membranes, adherence to fat-modified diet and, 364  
     dietary  
         glucose metabolism and, 1310  
         platelet function and, 1117S  
     effect on endothelial cell barrier function, glutathione redox cycle in (porcine), 60  
     free, plasma, resistant starch and, 879

monounsaturated  
     effects on plasma cholesterol and LDL cholesterol, 995  
     polyunsaturated fatty acids vs. in lipid-lowering diet, 115, 667

n-3. *See also* Fish; Fish oils  
     accretion in brain and retina, low-linolenic acid diet supplemented with docosahexaenoic acid (chick), 1338  
     detary fish oil and plasma and tissue lipids in formula-fed infants (pig), 1317  
     dietary monounsaturated rapeseed oil vs polyunsaturated sunflower oil in hyperlipidemia and, 667  
     plasma n-3 PUFA concentrations of Alaskan Eskimos, 384

n-6, plasma, effect on immune function in elderly population, 572

neutrophil, eicosapentaenoic acid concentration, dietary  $\alpha$ -linolenic acid and, 1304

nonesterified, plasma, effect of high-fat and carbohydrate meal, 53

odd-chain, in propionate metabolism, 1332

plasma, eicosapentaenoic acid concentration, dietary  $\alpha$ -linolenic acid and, 1304

polyunsaturated  
     effect on immune function in elderly population, 572  
     effect on plasma cholesterol and LDL cholesterol, 995  
     monounsaturated fatty acids vs. in lipid-lowering diet, 115, 667  
     plasma n-3 PUFA concentrations, diet, and bleeding times of Alaskan Eskimos, 384  
     supplementation during pregnancy, 454S

saturated  
     dietary palmitic acid and serum cholesterol concentration, 841  
     effects of stearic, palmitic, myristic, and lauric acids on blood lipids and factor VII coagulant activity, 371  
     effects of *trans* fatty acids on plasma lipids and lipoproteins, 861  
     serum lipid composition, calculation (letters), 1093  
     short-chain, fecal excretion, effect of consumption of *Bifidobacterium longum*-enriched yogurt, 428

*trans*, effects on plasma lipids and lipoproteins, 861

Fermentation, colonic  
     effect of lactic acid bacteria, 74

polydextrose, 1362  
 resistant starch, 626, 879  
 Ferritin, serum  
 ascorbic acid supplementation and, 1381  
 iron status, 502S  
 Fetus, maternal vitamin A status and, 517S  
 Fiber, dietary  
 blood pressure and, 1130S  
 chronic degenerative disease and diet, 1153S  
 definition, 679S  
 effect on postprandial thermogenesis, fat oxidation, and satiety, 1386  
 glycemic index, satiety, and cholecystokinin response, 787S  
 health benefits, 1242S  
 hypocholesterolemic effect of psyllium, method of administration and, 1055  
 intake in elderly population, 773S  
 postprandial glycemic response to bread containing intact kernal vs milled flour, 779S  
 rate of digestion of products prepared from different types of barley flour, 780S  
 recommended dietary intake, 1242S  
 satiating effects, delayed gastric emptying vs slowed intestinal absorption, 87  
 soluble  
 lipid profiles after daily consumption of oat-based cereal, 66  
 postprandial glucose and insulin responses, effect of food structure and amylose-amylopectin ratio, 1075  
 postprandial glycemic response to, 776S  
 satiety and postprandial metabolic response to, 793S  
 sterol excretion by ileostomy subjects and, 785S  
 supplementation, hypocholesterolemic effects, 1050  
 in vegetarian diets, trace element bioavailability and, 1223S  
 Fibrinolysis  
 effects of low-fat, high-fiber diet, 935  
 effects of stearic, palmitic, myristic, and lauric acids, 371  
 Fish, dietary intake, serum lipid response to, influence of dietary fat intake, 1060  
 Fish oils, dietary intake  
 serum lipid response to, influence of dietary fat intake, 1060  
 tissue eicosapentaenoic acid concentrations and, 1304  
 Flaxseed oil, dietary intake, tissue eicosapentaenoic acid concentrations and, 1304  
 Folate  
 deficiency, *S*-adenosylmethionine response to methionine loading (rat), 1033  
 dietary intake, cancer and, 1162S  
 plasma homocysteine and, 940  
 Folic acid, supplementation, in women of childbearing age, 532S  
 neural tube defects and, 511S  
 Food and Agriculture Organization, dietary assessment issues, 269S  
 Food frequency, postprandial insulin and glucose responses, 706S  
 Food-frequency questionnaire  
 design considerations for studies utilizing, 180S  
 development of, future directions, 171S  
 multicultural, use with pregnant and lactating women, 203S  
 semiquantitative, statistical issues, 262S  
 Food habits, cultural characteristics, 190S  
 Food intake  
 children's self-reports, cognitive model, 212S  
 error in estimation, relationship between data collection methodology and analysis methodology, 253S  
 food-intake surveys in estimating exposure to nonnutrients, 240S  
 multiple-day weighed record for estimating Senegalese children's food intakes during weaning, 266S  
 nutrient calculation, lack of uniformity in methodology, 157S  
 Food recall, 24-hour, clarification via food-frequency questionnaire in pregnant and lactating women, 203S  
 Food structure  
 food matrix and impact of amylose on postprandial glucose and insulin responses, 784S  
 influence on glucose and insulin responses to barley products, 1075  
 metabolic response to starch in bread containing intact kernal vs milled flour, 779S  
 metabolic response to starch in cereal and legume products, 777S  
 postprandial metabolism in non-insulin-dependent diabetes and, 794S  
 Formula feeding. *See* Infant nutrition  
 Fructose, dietary intake  
 in diabetes mellitus, 753S  
 plasma lipids and, 710S  
 Gastric acid, basal output, iron absorption and, 1376  
 Gastric emptying  
 effect of guar gum, 87, 776S  
 effect of physical activity, 778S  
 fat and starch gastric emptying rate, double-isotopic study, 781S  
 lipid loading and, 782S  
 Gastric inhibitory polypeptide, postprandial response, high-fiber vs low-fiber meal, 1386  
 Gastrointestinal tract  
 amino acid losses, 70  
 dietary fiber and, 1242S  
 transit time, effect of consumption of *Bifidobacterium longum*-enriched yogurt, 428  
 Geriatric population  
 biological variation in iron-status indexes in elderly women (*letter*), 130  
 carbohydrate intake in, 773S  
 cholecalciferol and parathyroid hormone secretion, 1040  
 dietary assessment methods, 221S  
 energy intake in, underreporting of, 1286  
 immune function, effect of diet and plasma fatty acid composition, 572  
 iron stores and iron absorption, 1376  
 lactose digestion and tolerance in elderly Asian-Americans, 1021  
 NHANES III supplemental nutrition survey of older Americans, 224S  
 plasma lipid, lipoprotein, and apolipoprotein concentrations, relation to dietary intake, 32  
 plasma vitamin E concentration and insulin action in, 1291  
 undernutrition and disease, 317  
 vitamin B-12 requirements (*letter*), 1093  
 vitamin D intake, sunlight exposure, and plasma 25-hydroxyvitamin D concentration in elderly women, 80  
 Global warming, global impact of meat consumption, 1099S  
 Glucagon  
 plasma, thiamin deficiency and (rat), 1045  
 secretion, in non-insulin-dependent diabetes, effects of vitamin D supplementation, 1083  
 $\beta$ -Glucans, rate of digestion of products prepared from different types of barley flour, 780S  
 Gluconeogenesis, thiamin deficiency and (rat), 1045  
 Glucose  
 dietary intake, plasma lipids and, 710S  
 kinetics, thiamin deficiency and (rat), 1045  
 metabolic disposal, 682S  
 metabolism, fatty acid composition of high-fat diet and, 1310  
 plasma  
 resistant starch and, 879  
 thiamin deficiency and (rat), 1045  
 postprandial response  
 amylose content and effect of food matrix, 784S  
 to barley products, 1075  
 to bread containing intact kernal vs milled flour, 779S  
 to carbohydrates, food structure and, 699S  
 to guar gum, 776S, 914  
 high-fiber vs low-fiber meal, 1386  
 lipid loading and gastric emptying and, 782S  
 in non-insulin-dependent diabetes, food structure and, 794S  
 to potato chips and milk chocolate bars in diabetic teenagers, 792S  
 processing and metabolic response to legumes, 783S  
 relation to satiety and cholecystokinin response, 787S  
 simple vs complex carbohydrate meal, 789S  
 to vegetables in mixed meals, 793S  
 turnover, in elderly population, plasma vitamin E concentration and, 1291  
 Glucose tolerance, pyruvate and, in obese Zucker rats, 331  
 Glucose transporter(s)  
 GLUT2, 690S  
 GLUT5, 690S

Glutamine, metabolism, response to enteral and intravenous feeding, 1395

Glutathione, protective effect in fatty acid-mediated injury to vascular endothelium (porcine), 60

Glutathione peroxidase  
copper and (rat), 654  
protective effect in fatty acid-mediated injury to vascular endothelium (porcine), 60

Glutathione reductase, protective effect in fatty acid-mediated injury to vascular endothelium (porcine), 60

Glycemia, postprandial, prediction of infant birth weight in gestational diabetes, 1409

Glycemic index  
bread containing intact kernels vs milled flour, 779S  
carbohydrate foods, 699S  
in diabetes, 747S, 794S, 1265  
diet, in diabetes mellitus, 1265  
low, carbohydrate foods, 706S. *See also Carbohydrate, lente*  
metabolic response to starch in cereal vs legume products, in vitro approach, 777S  
simple vs complex carbohydrate meal, 789S

Glycogen  
liver, thiamin deficiency and (rat), 1045  
muscle  
exercise performance and, 790S  
pyruvate and, in obese Zucker rats, 331

Glycolysis, in intense exercise, 790S

Goiter, assessment, iodine status and, 1415

Graham, Sylvester, 1103S

Growth and development  
children reared on vegetarian diets, 1176S  
cystic fibrosis children, 123  
macrobiotic nutrition and child health, 1187S  
pyruvate and, in obese Zucker rats, 331  
zinc supplementation of infant formula, 985

Guar gum  
postprandial glycemic response to, 776S, 914  
satiating effects, delayed gastric emptying vs slowed intestinal absorption, 87

Haig, Alexander, 1103S

Hair, chronological changes in zinc concentrations during dietary zinc deprivation (pig), 649

Health, global impact of meat consumption, 1099S

Health care reform, implications for medical nutrition therapy, 1275

Health reform, historical development of vegetarianism, 1103S

Health services, utilization of, vegetarianism and, 1171S

Heart, response to rapid weight loss in obesity (rat), 566

Heart rate  
iron supplementation in iron deficiency and, 908  
simple vs complex carbohydrate meal, 789S

Hematologic parameters, macrobiotic nutrition and child health, 1187S

Hepatic triglyceride lipase, lipoprotein lipolysis in hypertriglyceridemia, 379

Holohaptocorrin, serum, staging vitamin B-12 status in vegetarians, 1213S

Holotranscobalamin II, serum, staging vitamin B-12 status in vegetarians, 1213S

Homocysteine  
plasma  
coronary artery disease and, 940  
response to methionine loading, vitamin B-6 deficiency vs folate deficiency (rat), 1033  
redox status and protein binding, in hyperhomocysteinemia due to cobalamin deficiency, 631

Hunger ratings, effects of aspartame vs sucrose, 338

Hydrodensitometry, body composition of Native American women, 964

Hydrogen  
breath hydrogen excretion. *See Breath hydrogen test*  
resistant starch and breath hydrogen excretion, 626

Hydrolysis index  
metabolic response to starch in cereal vs legume products, in vitro approach, 777S  
processing and metabolic response to legumes, 783S

3-Hydroxy-3-methylglutaryl coenzyme A (HMG-CoA) reductase, hepatic activity, dietary citrus pectin and (guinea pig), 869

25-Hydroxyvitamin D, plasma, in elderly women, effect of dietary vitamin D intake and sunlight exposure, 80

Hypercholesterolemia  
dietary fiber in, 1050  
method of administration and hypocholesterolemic effect of psyllium, 1055  
effects of dietary rapeseed oil with/without squalene, 356  
immune milk in, 929

Hyperinsulinemia  
carbohydrate, fat, and insulin sensitivity, 686S  
carbohydrate intake in, 710S

Hyperlipidemia  
carbohydrate, fat, and insulin sensitivity, 686S  
carbohydrate intake in, 710S  
dietary monounsaturated rapeseed oil vs polyunsaturated sunflower oil in, 667  
dietary monounsaturated vs polyunsaturated fatty acids in, 115  
of pregnancy, 454S  
pyruvate supplementation of low-cholesterol, low-fat diet in, 423

Hyperphagia, high-fat-diet challenge and, 786S

Hypertension  
in African Americans, diet and, 103  
diet and, 1130S  
in African Americans, 103  
dietary assessment in, 146S  
high-calcium diet in, effect on nutrient consumption, plasma lipids, and lipoproteins, 900  
in pregnancy, modifying maternal fat intake in, 454S

Hypertriglyceridemia, lipoprotein lipolysis in, 379

Ileostomy subject  
cholesterol absorption and excretion, effect of dietary cholesterol, 48  
contribution of gastrointestinal amino acid losses to maintenance requirements, 70  
effect of psyllium husk and seed on sterol metabolism, 395  
effect of rye bran on excretion of bile acids, cholesterol, nitrogen, and fat, 389  
sterol excretion, effects of dietary fiber, 785S

Immune function  
in elderly population, effect of diet and plasma fatty acid composition, 572  
vitamin A and, 922

Immune milk, hypocholesterolemic and blood pressure effects, 929

Infant, breast-fed, vitamin B-6 status, 1297

Infant, newborn  
low birth weight, maternal iron-deficiency anemia and, 492S  
neural tube defect, maternal folate supplementation and, 511S

Infant, preterm, vitamin A intake and status, vitamin A supplementation of intravenous lipids and, 586

Infant nutrition  
breast-milk intake and human milk macronutrient content and influencing factors, 600  
formula feeding  
dietary fish oil and plasma and tissue lipids (pig), 1317  
low-linoleic acid diet supplemented with docosahexaenoic acid, accretion of n-3 fatty acids in brain and retina and (chick), 1338  
zinc supplementation, 985  
importance of maternal vitamin A status, 517S  
lipid-supplemented parenteral nutrition, metabolic consequences, 659  
vitamin A intake and status of preterm infant, vitamin A supplementation of intravenous lipids and, 586

Instrument effect, multiple-day weighed record for estimating Senegalese children's food intakes during weaning, 266S

Insulin  
action, in elderly population, plasma vitamin E concentration and, 1291  
metabolic clearance rate, in chronic renal failure, low-protein, low-phosphorus diet and, 663  
plasma  
pyruvate and, in obese Zucker rats, 331  
resistant starch and, 879  
thiamin deficiency and (rat), 1045

postprandial response  
 amylose content and effect of food matrix, 784S  
 to barley products, 1075  
 to bread containing intact kernels vs milled flour, 779S  
 to carbohydrates  
     food structure and, 699S  
     lente carbohydrate foods, 706S  
 to guar gum, 776S, 914  
 high-fiber vs low-fiber meal, 1386  
 lipid loading and gastric emptying and, 782S  
 in non-insulin-dependent diabetes, food structure and, 794S  
 to potato chips and milk chocolate bars in diabetic teenagers, 792S  
 processing and metabolic response to legumes, 783S  
 relation to satiety and cholecystokinin response, 787S  
 simple vs complex carbohydrate meal, 789S  
 to vegetables in mixed meals, 793S  
 secretion, in non-insulin-dependent diabetes, effects of vitamin D supplementation, 1083  
 serum, relation to diet in South Asian and European men, 1069  
 Insulin-like growth factor-binding proteins, serum, response to intravenous vs intragastric feeding (rat), 1403  
 Insulin-like growth factor-I, serum, response to intravenous vs intragastric feeding (rat), 1403  
 Insulin resistance, 686S  
 lipoprotein response to low-fat, high-carbohydrate diet plus exercise training, 820  
 pyruvate and, in obese Zucker rats, 331  
 relation to diet in South Asian and European men, 1069  
 International nutrition, *Editorial*, 1263  
 Intestinal absorption  
     calcium, during lactation, 593  
     in calculation of renal net acid excretion, 1356  
     carbohydrate, 690S  
         food properties affecting, 699S  
     cholesterol  
         effects of dietary cholesterol, 1325  
         in ileostomy subjects, effect of dietary cholesterol, 48  
     effect of guar gum, 87  
     glucose, guar gum viscosity and, 914  
     iron  
         ascorbic acid supplementation and, 1381  
         effect of EDTA, 644  
         iron stores and, 1376  
     plasma response of children to short-term  $\beta$ -carotene supplementation, 1369  
 Intestinal motility, effect of guar gum, 776S  
 Iodine  
 status, goiter assessment and urinary iodine-creatinine ratio, 1415  
 supplementation, in women of childbearing potential, 532S  
 Iron  
 absorption  
     ascorbic acid supplementation and, 1381  
     effect of EDTA, 644  
     iron stores and, 1376  
 bioavailability, ascorbic acid supplementation and, 1381  
 dietary intake, effect on spontaneous physical activity (rat), 413  
 status  
     biological variation in iron-status indexes in elderly women (*letter*), 130  
     of vegetarians, 1233S  
 supplementation  
     compliance (*letter*), 433  
     in iron deficiency, effect on work productivity, 908  
 Iron deficiency  
 in children reared on vegetarian diets, 1176S  
 effect on spontaneous physical activity (rat), 413  
 iron supplementation in, effect on work productivity, 908  
 in pregnancy, 542S  
     assessment, 502S  
 in vegetarians, 1176S, 1233S  
 Iron-deficiency anemia  
 in children reared on vegetarian diets, 1176S  
 in pregnancy, 492S  
 Kellogg, John Harvey, 1103S  
 Kidney, net acid excretion, estimation, 1356  
 Kidney failure, chronic, insulin clearance in, low-protein, low-phosphorus diet and, 663  
 Labor and delivery, premature  
     dietary n-3 polyunsaturated fatty acids and, 454S  
     maternal iron-deficiency anemia and, 492S  
 Lactase deficiency, 735S  
 Lactate  
     plasma, thiamin deficiency and (rat), 1045  
     production, in intense exercise, 790S  
 Lactation  
     calcium kinetics during, 593  
     calcium requirements, 477S  
     dieting during, 446S  
         milk production and, 833  
     effect on energy metabolism, 42  
     exercise during, 446S  
     infant breast-milk intake, human milk macronutrient content and influencing factors, 600  
     magnesium homeostasis, 990  
     maternal vitamin A status, 517S  
     maternal vitamin B-6 status, 1297  
     modifying fat intake during, 454S  
     nutritional consequences of lupus and diabetes, 465S  
     nutritional status in vegetarians, 1182S  
     promoting positive nutritional practices during, 525S  
     vitamin D supplementation in, 484S  
 Lactic acid bacteria, effect on colonic fermentation and lactose malabsorption, 74  
*Lactobacillus acidophilus*. *See* Lactic acid bacteria  
 Lactose, dietary intake, in elderly population, 773S  
 Lactose intolerance, in adult and elderly Asian-Americans, 1021  
 Lactose malabsorption, lactic acid bacteria in, 74  
 Lactose maldigestion, 735S  
     metabolism and tolerance of lactose in adult and elderly Asian-Americans, 1021  
 Late luteal phase dysphoric disorder (*letter*), 1419  
 Lauric acid  
     effect on blood lipids and factor VII coagulant activity, 371  
     effect on serum cholesterol concentration, 841  
 Lean body mass  
     bone mineral density in elderly female lactoovo vegetarians vs omnivores, 1197S  
     distribution in obesity, magnetic resonance imaging, 1277  
 Legumes  
     postprandial glycemic and insulinemic response to, processing and, 783S  
     satiety and postprandial metabolic response to, 793S  
 Letters  
     biological variation in iron-status indexes in elderly women, 130  
     dietary diversity and health, 950  
     linoleic acid and coronary artery disease, 949, 1418  
     lipid fatty acids calculated on a concentration vs percentage basis, 1093  
     nurses need education too, 129  
     operational equivalence between segmental and whole-body bioelectrical impedance in renal patients, 675  
     premenstrual syndrome does exist, 1419  
     prophylactic vitamin C: misplaced zeal, 131  
     supplementation study compliance and the role of health care staff, 433  
     vitamin B-12 and elderly people, 1093  
 Leucine  
     homeostasis, tracer-derived estimates, 1000  
     kinetics  
         dietary nonspecific nitrogen and, 1347  
         response to enteral and intravenous feeding, 1395  
     oxidation  
         tracer-derived estimates of leucine balance, 1000  
         tracer-derived estimates of leucine requirements, 1000  
         requirements, tracer-derived estimates, 1000  
 Linoleic acid, coronary artery disease and (*letter*), 949, 1418

Linolenic acid, dietary intake, accretion of n-3 fatty acids in brain and retina and (chick), 1338

$\alpha$ -Linolenic acid, dietary intake, tissue eicosapentaenoic acid concentrations and, 1304

Lipases, lipoprotein lipolysis in hypertriglyceridemia, 379

Lipemia, postprandial, sucrose in lipid-rich meal and, 853

Lipid(s)

- dietary fish oil and plasma and tissue lipids in formula-fed infants (pig), 1317
- intravenous, vitamin A supplementation, for preterm infants, 586
- metabolism, fatty acid composition of high-fat diet and, 1310
- plasma
  - carbohydrate intake and, 710S
  - $\beta$ -carotene supplementation and lipid peroxidation in smokers, 884
  - effect of daily consumption of oat-based cereal, 66
  - effects of dietary *trans* fatty acids, 861
  - effects of pyruvate supplementation in hyperlipidemic subjects on low-cholesterol, low-fat diet, 423
  - eicosapentaenoic acid concentration, dietary  $\alpha$ -linolenic acid and, 1304
  - in elderly population, relation to dietary intake, 32
  - high-calcium diet and, in hypertension, 900
  - of ileostomy subjects, effect of rye bran, 389
  - in Mvskoke Indians, diet and, 847
  - whole vs skim milk consumption and, 612

serum

- in African Americans, diet and, 103
- carotenoid supplementation and, 896
- dietary monounsaturated vs polyunsaturated fatty acids and, 115
- effects of stearic, palmitic, myristic, and lauric acids, 371
- fatty acid composition, calculation (*letter*), 1093
- fructose ingestion and, 753S
- response to dietary n-3 fats, influence of dietary fat intake, 1060

Lipoproteins, lipoproteins, in hypertriglyceridemia, 379

Lipoplysaccharide, enhancement of anti-tetanus toxoid antibody response (rat), 922

Lipoprotein(s)

- high-density, whole vs skim milk consumption and, 612
- lipolysis, in hypertriglyceridemia, 379
- low-density
  - dietary citrus pectin and (guinea pig), 869
  - whole vs skim milk consumption and, 612

plasma

- effects of dietary *trans* fatty acids, 861
- in elderly population, relation to dietary intake, 32
- high-calcium diet and, in hypertension, 900
- in Mvskoke Indians, diet and, 847

serum

- effect of dietary palmitic acid, 841
- effect of stearic, palmitic, myristic, and lauric acids, 371
- fatty acid composition of high-fat diet and, 1310
- in pregnancy, 454S
- response to dietary n-3 fats, influence of dietary fat intake, 1060
- in vegetarians, 1325

triglyceride-rich, in sucrose-induced postprandial triglyceridemia, 853

very-low-density, metabolism, 795

Lipoprotein lipase

- activity after high-fat and carbohydrate meal, 53
- lipoprotein lipolysis in hypertriglyceridemia, 379

Liver, cholesterol homeostasis, dietary citrus pectin in (guinea pig), 869

Lung, function, dietary vitamin C intake and, 110

Lupus erythematosus, systemic, nutritional consequences during pregnancy and lactation, 465S

Lutein/zeaxanthin, serum, smoking and, 891

Lycopene

- serum, smoking and, 891
- supplementation, plasma carotenoid concentration and, 896

Lymphocyte(s), x-ray induction of micronuclei,  $\beta$ -carotene prevention of, 409

Macrobiotic diet, child health, 1187S

Macronutrient(s), balance, alcohol and postmeal fat storage, 619

Magnesium

- dietary intake, bone mineral density in phenylketonuric children and, 419
- homeostasis, during lactation, 990
- Magnetic resonance imaging, adipose tissue distribution, gender differences, 1277
- Malabsorption
  - glucose-galactose, 690S
  - lactose, lactic acid bacteria in, 74
  - vitamin E, in short-bowel syndrome, vitamin E supplementation for, 1270
- Maldigestion
  - lactose, 735S
  - sucrose, 735S
- Malnutrition
  - body composition of malnourished children after dietary supplementation, 5
  - in Crohn's disease, body composition assessment, 325
  - dental caries and, salivary defense system in, 788S
  - scientific issues, 1255S
- Manganese, content and bioavailability in vegetarian diets, 1223S
- Maternal nutrition
  - calcium requirements, 477S
  - diet and pregnancy outcome, 532S
  - dieting during pregnancy, 446S
  - energy and macronutrient intake, 474S
  - energy requirements for term pregnancy, 439S
  - folate supplementation and neural tube defects, 511S
  - importance of maternal vitamin A status in infancy and early childhood, 517S
  - in insulin-dependent diabetes mellitus, 465S
  - iron deficiency, assessment, 502S
  - iron-deficiency anemia and pregnancy outcome, 492S
  - magnesium homeostasis, 990
  - maternal/infant dyad, 542S
  - modifying fat intake, 454S
  - promoting positive nutritional practices during pregnancy and lactation, 525S
  - symposium introduction, 437S
  - symposium overview and analysis, 542S
  - in systemic lupus erythematosus, 465S
  - vegetarian population, 1182S
- McCollum Award Lecture, triglyceride-rich lipoproteins and atherosclerosis—new perspectives, 795
- Measurement errors
  - calibration approach to bias in multicenter cohort studies on diet and cancer, 245S
  - food-frequency questionnaire, semiquantitative, 262S
  - meal- vs list-based methods of dietary assessment, 175S
- Memory, children's self-reports of food intake, 212S
- Menstrual cycle, luteal phase
  - effect of restrained eating, 92
  - late luteal phase dysphoric disorder (*letter*), 1419
- Metabolic rate
  - alcohol ingestion and, 805
  - basal
    - measurement in respiratory chamber, 775S
    - variation in Columbian women during course of one year, 20
  - effect of habitual exercise, 13
  - resting
    - effect of sedentary activities, 556
    - endurance exercise, resistance training, and very-low-energy diet in obesity and, 1088
    - during lactation, 42
    - preexercise data vs nonexercise control-day data, 28
    - pyruvate and, in obese Zucker rats, 331
    - variation in Columbian women during course of one year, 20
- Methane, resistant starch and breath methane excretion, 626
- Methionine loading, vitamin B-6 deficiency vs folate deficiency (rat), 1033
- Methylmalonic acid, excretion, in lactating women on vegetarian diets, 1182S
- Methylmalonic acidemia, 1332
- Micronuclei, x-ray induction of micronuclei in lymphocytes,  $\beta$ -carotene prevention of, 409

Micronutrient(s), dietary intake, cancer risk and, 1162S

Milk

- cow
  - skim milk powder. *See* Immune milk
  - whole vs skim, blood lipid profile and, 612
- human
  - magnesium in, 990
  - production, dieting during lactation and, 833
  - protein, fat, carbohydrate, and energy contents and influencing factors, 600
  - vitamin A in, 517S

immune. *See* Immune milk

Minerals, supplementation, in women of childbearing potential, 532S

Mortality rate

- dietary vitamin A intake and child mortality, 401
- healthy Seventh-day Adventist lifestyle and risk of disease, 1124S

Multicomponent model, predictive accuracy of bioelectrical impedance in estimating FFM of Native American women, 964

Myocardium, response to rapid weight loss in obesity (rat), 566

Myristic acid

- effect on blood lipids and factor VII coagulant activity, 371
- effect on serum cholesterol concentration, 841

National Health and Nutrition Examination Survey

- assessment of U.S. diet, 164S
- NHANES I, dietary vitamin C intake and pulmonary function, 110
- NHANES III, supplemental nutrition survey of older Americans, 224S

Natural killer (NK) cells, effect of diet and plasma fatty acid composition, 572

Neural tube defect, congenital

- maternal diet and, 532S
- maternal folate supplementation and, 511S

Neutron-capture analysis, *in vivo*, total-body nitrogen after refeeding in anorexia nervosa, 98

Neutrophil phospholipids, fatty acids, eicosapentaenoic acid concentration, dietary  $\alpha$ -linolenic acid and, 1304

Nitrogen

- dietary intake, amino acid kinetics, 1347
- excretion by ileostomy subjects, effect of rye bran, 389
- requirements, plant protein foods, 1203S
- total-body, after refeeding in anorexia nervosa, 98

Nitrogen retention, lipid-supplemented parenteral nutrition in neonates, 659

Norepinephrine, postprandial response, high-fiber vs low-fiber meal, 1386

Nutrient balance data, maternal nutrition, 542S

Nutrient intake

- of children, environmental influences on data collection methods, 207S
- in elderly population, 317

Nutrients, in consumed foods, calculation of, 157S

Nutrition. *See also* Diet

- in African Americans, coronary heart disease risk factors and, 103
- micronutrients and cancer, 1162S
- plant food protein, 1203S
- scientific issues, 1255S
- vegetarian. *See* Vegetarianism

Nutritional status

- evaluation of iodine status, urinary iodine-creatinine ratio, 1415
- macrobiotic nutrition and child health, 1187S
- $\alpha$ -tocopherol/ $\gamma$ -tocopherol ratio in adipose tissue,  $\alpha$ -tocopherol supplementation and, 1025

Nutrition assessment, promoting positive nutritional practices during pregnancy and lactation, 525S

Nutrition education

- development of vegetarian food guide, 1248S
- nurses need education too (*letter*), 129
- nutrition in medical schools: a case of mistaken identity, 960
- promoting positive nutritional practices during pregnancy and lactation, 525S

Nutrition monitoring

- nutritive values of consumed foods
  - assessment methods in Eastern Europe, 157S
  - assessment methods in Western Europe, 161S

rationale for international conference series on dietary assessment methods, 143S

research needs, 168S

Nutrition policy

- dietary assessment issues
  - need for improved methods in Eastern Europe, 273S
  - statement from World Health Organization, 271S
  - statement of Food and Agriculture Organization, 269S
- implications of food-carbohydrate research on nutrition recommendations and product development, 770S

Nutrition research

- assessing sensitivity to change in diet-intervention research, 185S
- culturally sensitive food-habit research, 190S
- dietary assessment, 146S
- dietary assessment methods, 168S
- implications of food-carbohydrate research on nutrition recommendations and product development, 770S
- priorities and recommendations, 275S

Nutrition surveys

- culturally sensitive food-habit research, 190S
- food-frequency questionnaires. *See* Food-frequency questionnaires
- methodological problems
  - in Eastern Europe, 157S
  - in Western Europe, 161S

National Health and Nutrition Examination Survey, 164S. *See also* National Health and Nutrition Examination Survey

Oats, dietary

- lipid-lowering effect of oat-based cereal, 66
- postprandial glycemic response to bread containing intact kernels vs milled flour, 779S
- sterol excretion by ileostomy subjects and, 785S

Obesity

- adaptation to high-fat diet, 350
- adipose tissue distribution, gender differences, 1277
- adolescence, criteria for overweight in adolescent preventive services, 307
- alcohol ingestion and, 619
- carbohydrate, fat, and insulin sensitivity, 686S
- carbohydrate intake and, 682S, 770S
- carbohydrate-rich foods and, 758S
- cardiac response to rapid weight loss in (rat), 566
- childhood
  - critical periods for development of, 955
  - effect of sedentary activities on resting metabolic rate, 556
- dietary fiber and, 1242S
- endurance exercise, resistance training, and very-low-energy diet in, 1088
- high-fat-diet challenge, fat-to-carbohydrate oxidation, 786S
- low-fat, ad libitum complex-carbohydrate diet vs low-energy diet in, 980

Native American women, predictive accuracy of bioelectrical impedance, 964

thermic effect of feeding, intragastric vs oral feeding, 971

total daily energy expenditure and, 800

weight cycling and (rat), 560

Obstetrics. *See* Labor and delivery; Pregnancy

Oligosaccharides, low-energy bulk sweeteners, 763S

Organic acids, excretion, in calculation of renal net acid excretion, 1356

Oropharyngeal stimulation, thermic effect of feeding, 971

Osteoporosis, lactose maldigestion and, 735S

Overweight

- in adulthood, predictive values of childhood body mass index, 810
- criteria for overweight in adolescent preventive services, 307

Oxygen consumption

- pyruvate and, in obese Zucker rats, 331
- variation in Columbian women during course of one year, 20
- weight cycling and (rat), 560

Palatability, low-fat, ad libitum complex-carbohydrate diet vs low-energy diet, 980

Palmitic acid

- effect on blood lipids and factor VII coagulant activity, 371
- effect on serum cholesterol concentration, 841

Parathyroid hormone, secretion, influence of vitamin D, 1040

Parenteral nutrition

- glutamine metabolism, response to enteral and intravenous feeding, 1395
- total
  - insulin-like growth factor-I response to intravenous vs intragastric feeding (rat), 1403
  - lipid-supplemented, in neonates, 659

Peanuts, dietary intake, effects on plasma cholesterol and LDL cholesterol, 995

Pectin

- dietary intake
  - hepatic cholesterol homeostasis and (guinea pig), 869
  - sterol excretion by ileostomy subjects and, 785S
  - metabolic effects, 879

Pediatric population. *See also* Infant

- accuracy of children's food records vs school-lunch observations, 218S
- body composition of cystic fibrosis children, 123
- body composition of malnourished children after dietary supplementation, 5
- body mass index values in childhood, predictive value for overweight at age 35 years, 810
- bone mineral density in phenylketonuria, 419
- children's self-reports of food intake, cognitive model, 212S
- dietary vitamin A intake and childhood mortality, 401
- eating patterns and nutrient intake, environmental influences on data collection methods, 207S
- importance of maternal vitamin A status in infancy and early childhood, 517S
- iodine status in Malawi schoolchildren, 1415
- macrobiotic nutrition and child health, 1187S
- multiple-day weighed record for estimating Senegalese children's food intakes during weaning, 266S
- obesity
  - critical periods for development of, 955
  - effect of sedentary activities on resting metabolic rate, 556
- plasma response to short-term  $\beta$ -carotene supplementation, 1369
- propionate metabolism, inborn errors, 1332
- vegetarianism, 1176S
  - development of vegetarian food guide, 1248S

Peer-reviewers, 1

Pentane. *See* Breath pentane

Pesticide residues, exposure to, food-intake surveys in estimation of, 240S

Phenylalanine, kinetics, dietary nonspecific nitrogen and, 1347

Phenylketonuria, bone mineral density in, 419

Phosphorus, dietary intake, bone mineral density in phenylketonuric children and, 419

Physical activity

- bone density in elderly female lactoovo-vegetarians vs omnivores, 1197S
- effects on gastric emptying, 778S
- during lactation, effect on energy metabolism, 42
- obesity and, 800
- during pregnancy and lactation, 446S
- spontaneous
  - dietary iron and (rat), 413
  - measurement in respiratory chamber, 775S

Phytate, in vegetarian diets

- iron absorption and, 1233S
- trace element bioavailability and, 1223S

*Plantago ovata*. *See* Psyllium

Plant food proteins, amino acid content and nutritional quality, 1203S

Plant sterols, fecal excretion, in vegetarians, cholesterol feeding and, 1325

Plasminogen activator, effects of low-fat, high-fiber diet, 935

Plasminogen activator inhibitor, effects of low-fat, high-fiber diet, 935

Platelet(s)

- function, dietary fatty acids and, 1117S
- membrane, fatty acid composition of, adherence to fat-modified diet and, 364

Policy-making. *See* Nutrition policy

Polydextrose, energy value and colonic fermentation, 1362

Polyols, low-energy bulk sweeteners, 763S

Polysaccharides, nonstarch, dietary intake, 774S

Preeclampsia, modifying maternal fat intake in, 454S

Pregnancy

- adolescent, iron status assessment, 502S
- anemia and iron-deficiency anemia in, 492S
- calcium requirements, 477S
- diabetes mellitus in, prediction of infant birth weight, 1409
- dieting during, 446S
- energy metabolism during, 439S
- exercise during, 446S
- hyperlipidemia of, 454S
- iron deficiency in, 542S
  - assessment, 502S
  - metabolic adaptation, 827
  - modifying fat intake during, 454S
  - multicultural food-frequency questionnaire, 203S
  - nutritional consequences of lupus and diabetes, 465S
  - nutrition during. *See* Maternal nutrition
  - outcome
    - healthy Seventh-day Adventist lifestyle and, 1124S
    - iron-deficiency anemia and, 492S
    - maternal diet and, 532S
  - promoting positive nutritional practices during, 525S
  - total body water in, bioelectrical impedance analysis, 578
  - vitamin A status, importance in infancy and early childhood, 517S
  - vitamin D supplementation in, 484S
  - weight gain during, human milk fat concentration and, 600

Premenstrual syndrome (*letter*), 1419

Preventive medicine

- promoting positive nutritional practices during pregnancy and lactation, 525S
- screening for overweight in adolescents, 307

Productivity, iron supplementation in iron deficiency and, 908

Propionate metabolism, inborn errors of, 1332

Propionic acidemia, 1332

Protein

- dietary intake, estimation of renal net acid excretion, 1356
- in human milk, 600
- repletion, after refeeding in anorexia nervosa, 98
- requirements, plant protein foods, 1203S

Psychomotor development, macrobiotic nutrition and child health, 1187S

Psyllium

- effect of psyllium husk and seed on sterol metabolism, 395
- hypcholesterolemic effect, method of administration and, 1055

Pulmonary function, dietary vitamin C intake and, 110

Pyridoxal 5'-phosphate, erythrocyte concentration, in lactating mothers and their infants, 1297

Pyruvate

- effects on metabolism and insulin resistance in obese Zucker rats, 331
- production, in intense exercise, 790S
- supplementation, effects on plasma lipids and body composition in hyperlipidemic subjects on low-cholesterol, low-fat diet, 423

Quality of life, low-fat, ad libitum complex-carbohydrate diet vs low-energy diet in obesity, 980

Questionnaire, food-frequency questionnaires. *See* Food-frequency questionnaires

Radionuclide study

- fat and starch gastric emptying rate, 781S
- lipid loading, gastric emptying, and glycemia, 782S
- stable isotope. *See* Stable isotope study

Rapeseed oil, dietary

- effect on serum lipids and cholesterol metabolism, 356
- in hyperlipidemia, 667

Repertory grid, food-repertory grid, validation with diabetic population, 201S

Research. *See* Nutrition research

Resistant starch, 679S

- in barley products, 1075
- effect on breath-hydrogen and methane excretion, 626
- metabolic effects, 879

rate of digestion of products prepared from different types of barley flour, 780S

Respiratory exchange ratio, preexercise resting data vs nonexercise control-day resting data, 28

Respiratory quotient (RQ)  
effect of strength training, 10  
variability, measurement in respiratory chamber, 775S

Responsiveness, assessing sensitivity to change in diet-intervention research, 185S

Restrained eating, ovulatory disturbances and bone health, 92

Retina, accretion of n-3 fatty acids, low-linolenic acid diet supplemented with docosahexaenoic acid (chick), 1338

Retinoids, in buccal mucosal cells, plasma intra- and interindividual variability and storage stability, 636

Rickets  
in children on macrobiotic diet, 1187S  
in children reared on vegetarian diets, 1176S

Risk analysis, predictive values of childhood body mass index for overweight in adulthood, 810

Rye bran, effect on excretion of bile acids, cholesterol, nitrogen, and fat by ileostomy subjects, 389

S-adenosylmethionine, response to methionine loading, vitamin B-6 deficiency vs folate deficiency (rat), 1033

Saliva, defense systems, malnutrition and dental caries, 788S

Satiety  
carbohydrate intake and, 728S  
effect of potato chips and milk chocolate bars in diabetic teenagers, 792S  
guar gum, delayed gastric emptying vs slowed intestinal absorption, 87

Satiety  
barley products, 107S  
carbohydrate intake and, 728S  
carbohydrate-rich foods and, 758S  
glycemic index, satiety, and cholecystokinin response, 787S  
high-fiber vs low-fiber meal, 1386  
low-fat, ad libitum complex-carbohydrate diet vs low-energy diet, 980  
mixed meals with vegetable and, 793S

Scientific issues, in nutrition and health, vegetarianism, 1255S

Screening  
criteria for overweight in adolescent preventive services, 307  
promoting positive nutritional practices during pregnancy and lactation, 525S

Selenium  
content and bioavailability in vegetarian diets, 1223S  
copper deficiency and (rat), 654

Selenoglutathione peroxidase, copper and (rat), 654

Setpoint theory, iron stores and iron absorption, 1376

Seventh-day Adventists. *See also* Vegetarianism  
cancer incidence, California Seventh-day Adventist population, 1136S  
diet and coronary heart disease, 1117S  
healthy Seventh-day Adventist lifestyle and risk of disease, 1124S

Short-bowel syndrome, vitamin E malabsorption, vitamin E supplementation for, 1270

Sitosterol, in vegetarians, cholesterol feeding and, 1325

Skeletal muscle, glycogen content. *See* Glycogen, muscle

Skinfold thickness, body composition of cystic fibrosis children, 123

Sleep patterns, restricted energy intake and, 346

Smoking  
 $\beta$ -carotene supplementation and lipid peroxidation in smokers, 884  
serum nutrient concentrations in African-American women and, 891

Snack foods, glycemic effect and satiating capacity in diabetic teenagers, 792S

Sodium alginate, dietary intake, sterol excretion by ileostomy subjects and, 785S

Sodium EDTA, iron absorption from food, 644

Sodium-glucose cotransporter (SGLT1), 690S

Spinach, satiety and postprandial metabolic response to, 793S

Squalene, dietary, effect on serum lipids and cholesterol metabolism, 356

Stable isotope study  
glutamine metabolism, response to enteral and intravenous feeding, 1395

tracer-derived estimates of leucine requirements, 1012

validation of tracer-derived estimates of leucine balance, 1000

Standardization, dietary assessment methods, 157S

Starch, 679S  
bioavailability, bread containing intact kernels vs milled flour, 779S  
digestion, guar gum viscosity and, 914  
digestion and absorption, food properties affecting, 699S  
gastric emptying rate, 781S  
hydrolysis, barley products, 1075  
metabolic response to  
in cereal vs legume products, in vitro approach, 777S  
food properties affecting, 699S

rate of digestion of products prepared from different types of barley flour, 780S

resistant. *See* Resistant starch

Stearic acid, effects on blood lipids and factor VII coagulant activity, 371

Sterol excretion  
in ileostomy subjects  
effect of dietary cholesterol, 48  
effect of dietary fiber, 785S  
effect of psyllium husk and seed, 395  
effect of rye bran, 389

neutral sterols, effect of consumption of *Bifidobacterium longum*-enriched yogurt, 428  
in vegetarians, cholesterol feeding and, 1325

Stool analysis, effect of consumption of *Bifidobacterium longum*-enriched yogurt on fecal metabolites, 428

Strength training, effect on 24-hour energy expenditure and substrate utilization, 10

Substrate utilization  
effect of strength training, 10  
lipid-supplemented parenteral nutrition in neonates, 659  
metabolic effects of resistant starch, 879  
in obesity, 350

Sucrose  
dietary intake  
in diabetes, 747S  
in elderly population, 773S  
plasma lipids and, 710S  
relation to hyperinsulinemia in South Asian and European men, 1069

effects on motivational ratings, taste preferences, and energy intakes, aspartame vs, 338

lipid-rich meal plus, postprandial triglyceridemia and, 853

maldigestion, 735S

replacement, low-energy bulk sweeteners, 763S

Sugars. *See also* specific sugars  
absorption, 690S  
dietary intake  
dental caries and, 719S, 788S  
diet glycemic index, 126S  
extrinsic, dietary intake, 774S  
nutritional classification, 679S  
undigestible (low-energy bulk sweeteners), 763S

Sulfur metabolism, in calculation of renal net acid excretion, 1356

Sunlight exposure, plasma 25-hydroxyvitamin D concentration in elderly women and, 80

Sweeteners, low-energy bulk sweeteners, 763S

Taste preferences, effects of aspartame vs sucrose, 338

Teeth, caries. *See* Dental caries

Television viewing, effect on obesity, 556

Tetanus toxoid, antibody response to, in vitamin A deficiency, lipopolysaccharide- and tumor necrosis factor- $\alpha$ -induced enhancement (rat), 922

Thermic effect of feeding, intragastric vs oral feeding, 971

Thermic effect of meal, effect of lactation, 42

Thermogenesis  
diet-induced, lipid-supplemented parenteral nutrition in neonates, 659  
postprandial  
high-fiber vs low-fiber meal, 1386  
simple vs complex carbohydrate meals, 789S

Thiamin deficiency, glucose metabolic response to endotoxin (rat), 1045

Thyroid hormones, copper and (rat), 654

TOBEC. *See* Electroconductivity, total body

Tocopherols. *See also* Vitamin E

- in buccal mucosal cells, plasma intra- and interindividual variability and storage stability, 636
- $\alpha$ -tocopherol/ $\gamma$ -tocopherol ratio in adipose tissue,  $\alpha$ -tocopherol supplementation and, 1025

Tocopherol succinate polyethylene glycol, vitamin E supplementation in short-bowel syndrome, 1270

Toxicants, exposure to, food-intake surveys in estimation of, 240S

Trace elements

- content and bioavailability in vegetarian diets, 1223S
- dietary intake, in elderly population, 317

Transferrin saturation, iron status, 502S

Triacylglycerol, chylomicron, effect of high-fat and carbohydrate meal, 53

Triglyceride(s)

- effect of psyllium husk and seed, 395
- medium-chain, insulin-like growth factor-I response to intravenous vs intragastric feeding (rat), 1403

plasma

- carbohydrate intake and, 710S
- pyruvate and, in obese Zucker rats, 331
- whole vs skim milk consumption and, 612

Triglyceridemia, postprandial, sucrose in lipid-rich meal and, 853

3,3',5'-Triiodothyronine, copper and (rat), 654

3,3',5'-Triiodothyronine, copper and (rat), 654

Tumor necrosis factor- $\alpha$ , enhancement of anti-tetanus toxoid antibody response (rat), 922

Undernutrition, in elderly population, 317

Urea production, tracer-derived estimates of leucine balance, 1000

Urinalysis, 24-hour urine nitrogen, validation of dietary surveys, 227S

Urine

- iodine-creatinine ratio, evaluation of iodine status, 1415
- magnesium excretion, during lactation, 990
- net acid excretion, estimation, 1356

Validation

- dietary assessment methods, 24-hour urine nitrogen and energy expenditure, 227S
- dietary assessment methods for culturally diverse populations, 198S
- food-frequency questionnaires, 171S
- tracer-derived estimates of leucine balance, 1000

Validity, food-frequency questionnaires, 171S

Variance, dietary data analysis, relationship between data collection methodology and analysis methodology, 253S

Vegan. *See* Vegetarianism

Vegetarianism

- blood pressure and, 1130S
- bone mineral density in elderly female lactoovo-vegetarians vs omnivores, 1197S
- calcium intake of vegetarians, 1238S
- cancer incidence, California Seventh-day Adventist population, 1136S
- cancer preventive properties of *Brassica* spp, 1166S
- cholesterol metabolism in, 1325
- coronary heart disease risk factors and, in African Americans, 103
- development of vegetarian food guide, 1248S
- diet and coronary heart disease, 1117S
- environmental responsibility and livestock industry, 1110S
- global impact of meat consumption, 1099S
- growth and development of children, 1176S
- health benefits of high-fiber diet, 1242S
- historical development, 1103S
- iron status of vegetarians, 1233S
- macrobiotic nutrition and child health, 1187S
- micronutrients and cancer, 1162S
- nutritional concerns of lactating women, 1182S
- plant food proteins, 1203S
- prevalence of chronic disease, medication use, and use of health services, 1171S
- scientific issues involving nutrition and health, 1255S
- staging vitamin B-12 status, 1213S
- trace elements in vegetarian diet, 1223S

Vitamin(s)

- dietary intake, in elderly population, 317
- supplementation, in women of childbearing potential, 532S

Vitamin A

- dietary and plasma concentrations, relation to plasma lipid concentrations in elderly, 32
- dietary intake

  - cancer and, 1162S
  - relation to child mortality, 401

- excess, 517S
- immune function and, 922
- serum, smoking and, 891
- supplementation

  - during pregnancy and lactation, 517S
  - in preterm infants, 586
  - in Sudanese children, effect on child mortality, 401

Vitamin A deficiency

- $\beta$ -carotene supplementation in, plasma response of children, 1369
- in infancy and early childhood, 517S
- relation to child mortality, 401

Vitamin B-6

- deficiency, *S*-adenosylmethionine response to methionine loading (rat), 1033
- status, in lactating mothers and their infants, 1297

Vitamin B-12

- plasma homocysteine and, 940
- requirements, in elderly people (*letter*), 1093
- serum total, staging vitamin B-12 status in vegetarians, 1213S

Vitamin B-12 deficiency

- in children on macrobiotic diet, 1187S
- in children reared on vegetarian diets, 1176S
- etiology and diagnosis, 1213S
- in lactating women on vegetarian diets, 1182S

Vitamin C. *See also* Ascorbic acid

- dietary and plasma concentrations, relation to plasma lipid concentrations in elderly, 32
- dietary intake, pulmonary function and, 110
- effect on x-irradiation induction of micronuclei in lymphocytes, 409
- prophylactic (*letter*), 131
- serum, smoking and, 891
- status, misclassification, 232S
- in vegetarian diet, iron absorption and, 1233S

Vitamin D

- dietary intake, plasma 25-hydroxyvitamin D concentration in elderly women and, 80
- influence on parathyroid hormone concentration, 1040
- status, in lactating women on vegetarian diets, 1182S
- supplementation

  - in non-insulin-dependent diabetes, effects on insulin and glucagon secretion, 1083
  - during pregnancy and lactation, 484S

Vitamin D deficiency

- in children reared on vegetarian diets, 1176S
- during pregnancy and lactation, 484S

Vitamin E. *See also* Tocopherols

- malabsorption, in short-bowel syndrome, vitamin E supplementation for, 1270
- plasma, in elderly population, effect on insulin action, 1291
- serum, smoking and, 891
- status

  - misclassification, 232S
  - $\alpha$ -tocopherol/ $\gamma$ -tocopherol ratio in adipose tissue,  $\alpha$ -tocopherol supplementation and, 1025
  - water-soluble supplement, in short-bowel syndrome, 1270

Walnuts, dietary intake, effects on plasma cholesterol and LDL cholesterol, 995

Weaning, multiple-day weighed record for estimating Senegalese children's food intakes during weaning, 266S

Weight cycling, obesity and (rat), 560

Weight gain

- prediagnostic, prediction of infant birth weight in gestational diabetes, 1409
- during pregnancy

  - fat gain and, 439S

human milk fat concentration and, 600  
maternal iron-deficiency anemia and, 492S

Weight loss  
endurance exercise, resistance training, and very-low-energy diet in obesity, 1088  
during lactation, milk production and, 833  
low-fat, ad libitum complex-carbohydrate diet vs low-energy diet, 980  
rapid, cardiac response (rat), 566

Wheat, dietary intake  
postprandial glycemic response to bread containing intact kernels vs milled flour, 779S

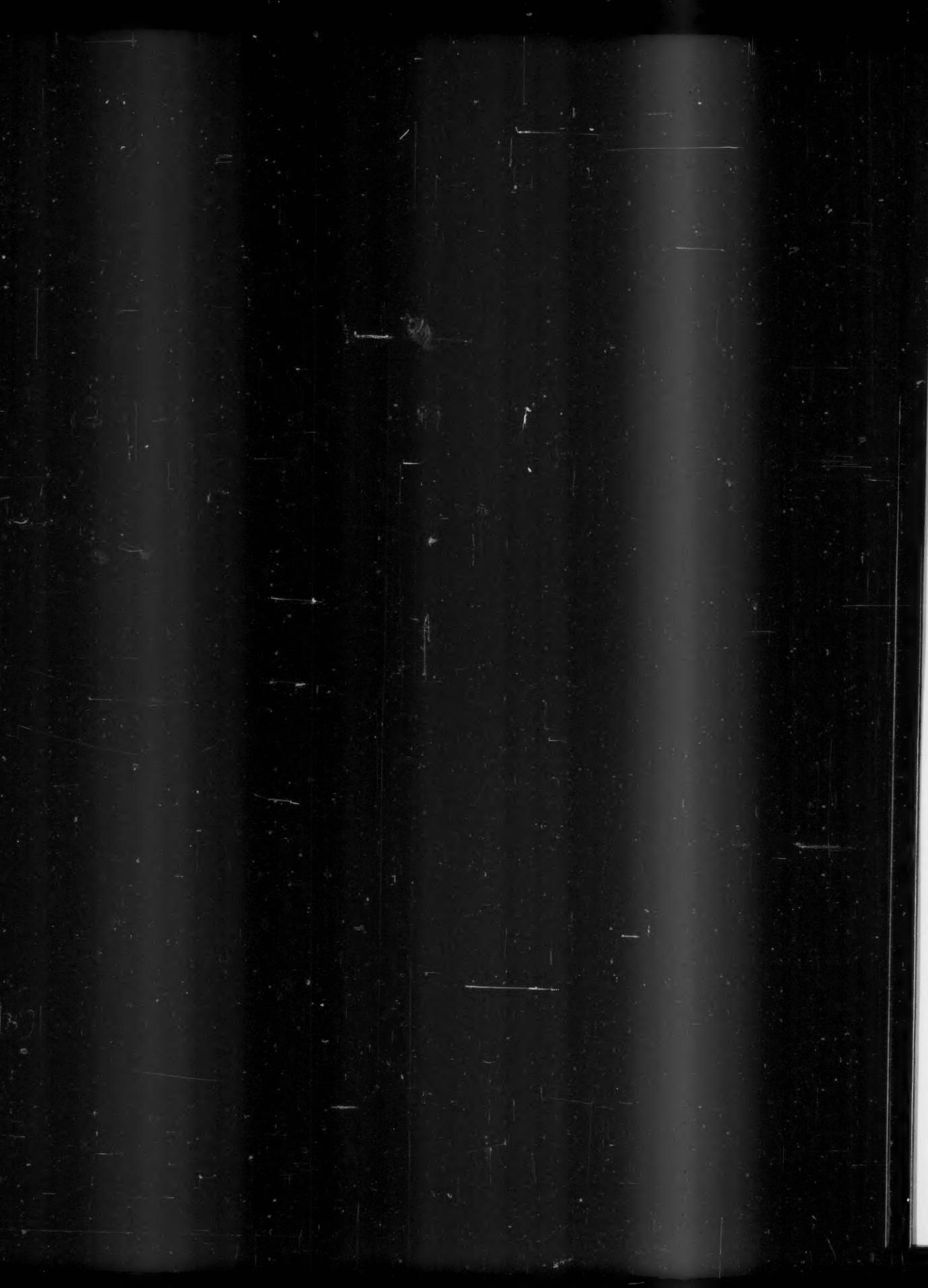
sterol excretion by ileostomy subjects and, 785S

World Health Organization, dietary assessment issues, 271S

X-irradiation, induction of micronuclei in lymphocytes, effects of  $\beta$ -carotene and ascorbic acid, 409

Zinc  
content and bioavailability in vegetarian diets, 1223S  
plasma, chronological changes in during dietary zinc deprivation (pig), 649  
supplementation  
of infant formula, 985  
in women of childbearing potential, 532S

Zinc deficiency, chronological changes in zinc concentrations during dietary zinc deprivation (pig), 649



## Author Index

### Volume 59

Abbey M, 995  
Abrams SA, 593  
Abumrad NN, 1045  
Achour L, 1362  
Acton RT, 940  
Adlercreutz H, 389  
Ågren JJ, 364, 1310  
Ahlwalia N, 131  
Ahola I, 364  
Alberts DS, 636  
Allard JP, 325, 884  
Allen BJ, 98  
Allen JR, 419  
Allen LH, 437S  
Almario R, 378  
Almérás N, 975  
Alstad T, 773S  
Alvarez JO, 940  
Åman P, 389  
Anderson GJ, 1338  
Anderson JEL, 201S  
Anderson JJB, 1197S  
Anderson JW, 1242S  
Anderson H, 389, 785S  
Anghileri L-J, 778S  
Antoine J-M, 778S, 781S  
Aparicio M, 663  
Apfelbaum M, 338, 560  
Applegate E, 435  
Arora D, 922  
Arthur B, 98  
Asp N-G, 679S, 699S, 770S, 793S, 794S  
Astrup A, 10, 350, 775S, 786S, 1386  
Aubertin J, 663  
Avruch L  
Baker JP, 325  
Balazs ND, 949, 1419  
Bandini LG, 556  
Baranowski J, 218S  
Baranowski T, 212S, 218S  
Barr SI, 92  
Barstaed L, 384  
Bartram H-P, 428  
Baumgartner RN, 964  
Baxter J, 980  
Beard JL, 131, 502S  
Beaton GH, 253S  
Beecher CWW, 1166S  
Beeson WL, 1136S  
Beilin LJ, 1060, 1130S  
Belling GB, 995  
Beresford SAA, 185S  
Betrand A, 778S  
Beumont PJV, 98  
Bingham SA, 227S  
Birkhed D, 773S  
Bistrian BR, 677  
Björck I, 699S, 777S, 779S, 783S, 794S, 1075  
Blackburn AL, 1088  
Blackburn GL, 1088  
Blanchard P, 879  
Blauw YH, 221S  
Block G, 232S  
Blundell JE, 728S  
Bobilya DJ, 649  
Boctor DL, 1055  
Boekholt HA, 42, 827  
Boer J, 975  
Bohmer T, 317  
Boillot J, 776S, 914  
Bormet FRJ, 763S, 776S, 914  
Bosaeus I, 48, 389  
Bosselaers I, 10  
Bothwell TH, 644  
Boxall JA, 949, 1419  
Brand Miller JC, 747S, 787S, 791S  
Bresson JL, 1332  
Briefel RR, 164S  
Briet F, 1362  
Brigant L, 560  
Brodie B, 395  
Bronstein MN, 439S  
Brotherhood JR, 791S  
Brown AJ, 949  
Brown J, 949  
Brown V, 1050  
Bruce Å, 770S  
Buchanan AV, 847  
Buemann B, 10, 350, 786S  
Buffenstein R, 346  
Bulkow LR, 384  
Bulux J, 1369  
Burke V, 1060  
Burley V, 728S  
Butte NF, 439S  
Buzzard IM, 143S, 275S  
Byers T, 891  
Byrne HK, 331  
Cacciapuoti F  
Campbell TC, 1153S  
Canfield LM, 1369  
Cantu TL, 566  
Carlson SE, 586  
Carpenter KJ, 435, 1096  
Carugh A, 896  
Cassidy CM, 190S  
Cebrick J, 103  
Cedermark G, 792S  
Chaisson CF, 240S  
Champ M, 776S, 879, 914  
Chandler RM, 331  
Chang CL, 66  
Chang-Claude J, 1143S  
Chao ESM, 1055  
Chapelon D, 338  
Chapman TE, 1000, 1012, 1347  
Charnley JM, 820  
Charzewska J, 157S  
Chen J, 1153S  
Chen X, 908  
Chiasson J-L, 1265  
Childs MT, 612  
Ching PLYH, 556  
Christensen NJ, 350, 786S, 1386  
Chumlea WC, 547, 810  
Clark ML, 53  
Cleland LG  
Clevidence BA, 861  
Coates RJ, 891  
Colonna P, 879  
Combe C, 663  
Connor WE, 384, 1338  
Cooke RJ, 586  
Copeland RB, 940  
Cornwell PE, 940  
Cortez MY, 331  
Cortiella J, 1347  
Coulston, 1275  
Cousins AL, 940  
Coward WA, 619  
Craig WJ, 1233S  
Cruz AL, 384  
Cuff A, 66  
Dagnelie PC, 1187S  
Dahlgren S, 389  
Dallal GE, 80  
Darnaun D, 1395  
Davis H, 218S  
Dawson-Hughes B, 80  
de Boer HM, 626  
de Groot LCPGM, 42, 221S, 827  
de Guise J, 0003  
de Haan AF, 626  
de Jonge L, 971  
Delafaye C, 663  
Delort-Laval J, 776S, 914  
Dengel JL, 990  
de Serrano JQ, 1369  
Després J-P, 975  
Deurenberg P, 908  
Dewey KG, 446S  
Dhansay MA, 853  
Diersen-Schade D, 1317

Dietz WH, 307, 556, 955  
 Di Maro G, 1291  
 DiSerio FJ, 1050  
 Divena C, 378  
 Domel SB, 212S, 218S  
 D'Onofrio F  
 Dop M-C, 266S  
 Douglass JS, 240S  
 Dratz EA, 1025  
 Drewnowski A, 338  
 Drews A, 777S, 1075  
 Drijvers JJMM, 827  
 Driver HS, 346  
 Dufour DL, 20  
 Dusdieker LB, 833  
 Dwyer JT, 1255S  
 Eastwood MA, 395  
 El Amin A, 401  
 El-Khoury AE, 1000, 1012  
 Ellegård L, 48  
 Emmett PM, 774S  
 Epstein WL, 1025  
 Ericson T, 788S  
 Erjavec J, 413  
 Estève J, 245S  
 Etherton TD, 847  
 Evans CDH, 201S  
 Evans WJ, 820  
 Falk H, 780S  
 Fawzi WW, 401  
 Fernandez ML, 869  
 Ferrara CM, 820  
 Ferraro R, 800  
 Ferris AM, 465S  
 Fiatarone MA, 820  
 Fielding BA, 53  
 Flourié B, 1362  
 Fønnebø V, 1124S  
 Fontvielle AM, 800  
 Forsythe HE, 203S  
 Frank GC, 207S  
 Fraser GE, 1117S, 1136S  
 Frayn KN, 53  
 Freeman GL, 566  
 French S, 980  
 French SJ, 87  
 Frentzel-Beyme R, 1143S  
 Fricker J, 338  
 Friedenreich CM, 251S  
 Fukagawa NK, 1000, 1012  
 Fulgoni V III, 1055  
 Fuller MF, 70  
 Furnée CA, 1415  
 Gage B, 203S  
 Gallagher PN Jr, 1197S  
 Gallagher SK, 1381  
 Galmiche J-P, 776S, 914  
 Galzerano D, 1291  
 Gamble GD, 929  
 Garby L, 908  
 Gardner JD, 810  
 Garrel DR, 971  
 Garry PJ, 1376  
 Garza C, 542S  
 Gaskin KJ, 419  
 Gavin MW, 1376  
 Geissler CA, 13  
 Gelissen IC, 395  
 Gerlach S, 428  
 Gershoff SN, 132  
 Ghidoni JJ, 566  
 Gibson RA, 1304  
 Gibson RS, 1223S  
 Gillespie WJ, 1088  
 Gin H, 663  
 Giuliano A, 1369  
 Glass D, 891  
 Gleason RE, 1000, 1012  
 Goldberg GR, 619  
 Goran MI, 1286  
 Go RCP, 940  
 Gore TB, 940  
 Granfeldt Y, 699S, 777S, 779S, 783S,  
 794S, 1075  
 Grant KL, 853  
 Grasset E, 1395  
 Gray-Donald K, 1409  
 Greenberg GR, 325  
 Green S, 728S  
 Gridley G, 232S  
 Griffiths AJ, 53  
 Gross R, 433  
 Gudmand-Høyer E, 735S  
 Guenther PM, 168S  
 Guille GM, 776S, 914  
 Gunter EW, 891  
 Guo SS, 547, 810  
 Gussow JD, 1110S  
 Gustafson NJ, 1242S  
 Gustafsson I-B, 115, 667  
 Gustafsson K, 793S  
 Hatchey DL, 454S  
 Haddad EH, 1248S  
 Hagander B, 793S  
 Haley NR, 131  
 Hall CB, 578  
 Hall D, 384  
 Hallmans G, 389  
 Halsted CH, 1096  
 Handelman GJ, 1025  
 Hankin JH, 198S  
 Hansky J, 787S  
 Harper IT, 800  
 Harris CL, 70  
 Harris MM, 566  
 Harrison JE, 325  
 Hautvast JGAJ, 42, 827, 908, 0017  
 Havel R, 795  
 Hayes KC, 841  
 Heaton KW, 774S  
 Hediger ML, 492S  
 Heim T, 659  
 Heiskanen K, 1297  
 Helsing E, 271S  
 Hemingway DL, 833  
 Hennig B, 60  
 Herbert V, 1093, 1213S  
 Herrera MG, 401  
 Heubi JE, 593  
 Heyward VH, 964  
 Heyward WL, 384  
 Hicks VL, 964  
 Himes JH, 307  
 Hiramatsu T, 1347  
 Hodgson JM, 949, 950, 1419  
 Hoffmann RG, 20  
 Holst JJ, 1386  
 Holt S, 787S  
 Ho ML, 593  
 Honig J, 1088  
 Hooper FG, 896  
 Horton TJ, 13  
 Hove H, 74  
 Howard WJ, 1050  
 Howman-Giles RG, 419  
 Hoyson R, 423  
 Hsu-Hage B, 950  
 Hughes VA, 820  
 Humphreys SM, 53  
 Humphries IRJ, 419  
 Hunninghake DB, 1050  
 Hunt JA, 1265  
 Hunt JR, 413, 1381  
 Ichikawa T, 409  
 Ikeda J, 134  
 Ikegami S, 409  
 Illingworth DR, 900  
 Innis SM  
 Inoue K, 409  
 Ivy JL, 331  
 Jacques PF, 32  
 James MJ, 1304  
 Janosky JE, 423  
 Jansen MC, 626  
 Järvi A, 794S  
 Jeejeebhoy KN, 325, 884  
 Jenkins AL, 706S  
 Jenkins DJA, 706S, 1055  
 Jen K-LC, 378  
 Jenner JL, 32  
 Jéquier E, 682S  
 Jespersen J, 371, 935  
 Johanning GL, 649  
 Johansson I, 788S  
 Johnson LK, 413, 1381  
 Johnson RK, 1286  
 Josse RG, 706S, 1265  
 Judd JT, 861  
 Just B, 1395  
 Kaaks R, 245S  
 Kabir I, 5  
 Kant AK, 950  
 Kant S, 433  
 Karakas SE, 378  
 Karanja N, 900  
 Karhupää P, 1310  
 Karklin A, 346  
 Karlström B, 794S  
 Kasper H, 428  
 Katan MB, 626  
 Kayden HJ, 1270  
 Kedzierewicz F, 782S  
 Keenan R, 70  
 Keen CL, 532S, 654  
 Kelber E, 428  
 Khaled MA, 5  
 Khaw K-T, 1040  
 Khilnani S, 378  
 Kiens B, 572, 789S  
 Kindt E, 317  
 King JC, 439S  
 Kinoshita B, 1050  
 Klesges LM, 805  
 Klesges RC, 805  
 Knutson SF, 1171S  
 Kobayashi S, 409  
 Kohlmeier L, 175S  
 Kolkhorst FW, 28

Kopp LE, 439S  
 Koski KG, 1409  
 Koziet J, 1395  
 Kranenborg EK, 975  
 Krempf M, 776S, 879, 914  
 Kris-Etherton PM, 677, 847, 1420  
 Kristal AR, 185S  
 Kurian R, 884  
 Kushi LH, 180S, 612

Lammi-Keefe CJ, 131  
 Lamont-Fava S, 32  
 Lamparelli RD, 644  
 Lang CH, 1045  
 LaRosa JC, 1050  
 Larsen PS, 600  
 Larsson B, 788S  
 Latgé C, 781S, 782S  
 Laurens M-H, 778S, 781S  
 Lawson DA, 28  
 Lazovich D, 185S  
 Lecannu G, 776S, 914  
 Leclère CJ, 776S, 914  
 Lenczycki KM, 201S  
 Leonard SB, 218S  
 Levin EY, 134  
 Levin RJ, 690S  
 Lewis CA, 940  
 Lewis S, 1099S  
 Liljeberg H, 699S, 779S, 1075  
 Lindquist SA, 439S  
 Lipsitz S, 401  
 Lipson AH, 419  
 Li R, 908  
 Liu K, 262S  
 Londree BR, 28  
 Lopez CY, 1369  
 Louis-Sylvestre J, 338  
 Lukaski HC, 578  
 Lundin E, 389  
 Lupien JR, 269S

Macaluso M, 940  
 Machlin LJ, 1025  
 MacPhail AP, 644  
 Madsen J, 1386  
 Mahalanabis D, 5  
 Mäkimattila S, 1310  
 Makrauer F, 80  
 Malek MA, 5  
 Maliranta H, 1310  
 Mangels AR, 990  
 Mansoor MA, 631  
 Mantzoros E, 1304  
 Manz F, 1356  
 Marais MP, 853  
 Marchini JS, 1347  
 Marckmann P, 371, 935  
 Mariotti A, 1332  
 Marmot MG, 1069  
 Marteau P, 1362  
 Martel Y, 1277  
 Massé J, 130  
 Massien C, 338  
 McCarron DA, 900  
 McCarthy DM, 1376  
 McCrory MA, 446S  
 McDowell MA, 224S  
 McGee DL, 636  
 McGovern PG, 612, 980  
 McKeigue PM, 1069  
 McLaren DS, 960

McMillan K, 1055  
 McNamara DJ, 869  
 McNamara JR, 820  
 Mealer CZ, 805  
 Melby CL, 103  
 Messing B, 1395  
 Michaelsen KF, 600  
 Miettinen TA, 356, 1325  
 Milan C, 266S  
 Miller JW, 1033  
 Miller RH, 331  
 Miller VT, 1050  
 Mills PK, 1136S  
 Milne A, 70  
 Mira M, 98  
 Mohamed KA, 401  
 Molina PE, 1045  
 Molis C, 776S, 914  
 Moore JH, 847  
 Morelli JA, 556  
 Mori TA, 1060  
 Morris CD, 900  
 Morris J, 1060  
 Mortensen PB, 74  
 Moser-Veillon PB, 990  
 Mossel EL, 1093  
 Mowé M, 317  
 Mueller S, 1055  
 Muesing RA, 861  
 Muggli R, 884  
 Murgatroyd PR, 619  
 Murmu D, 433  
 Murmu LR, 433  
 Murphy S, 1040

Nadeau MR, 1033  
 Nagengast FM, 626  
 Narcy C, 1332  
 Navia JM, 719S  
 N'Diaye AM, 266S  
 Nestel PJ, 401, 995  
 Nestle M, 952  
 Newman R, 1075  
 Ney DM, 1403  
 Nguyen M, 879  
 Nguyen P-M, 1265  
 Nielsen EJ, 578  
 Noakes M, 995  
 Noakes TD, 132  
 Nordgaard-Andersen I, 74  
 Nordlund Å, 788S  
 Nydahl M, 667  
 Nydahl MC, 115  
 Nyman M, 793S

O'Brien KO, 593  
 O'Connor RR, 1050  
 O'Dell BL, 649  
 Öhrvall M, 667  
 Olin KL, 654  
 Olson CM, 525S  
 Orwoll E, 1083  
 Österberg T, 773S  
 Ovaskainen M-L, 161S, 364

Page A, 566  
 Pakarinen P, 985  
 Palmason C, 1265  
 Pamuk ER, 891  
 Pancharunti N, 940  
 Paolissio G, 1291  
 Parkinson AJ, 384

Patel RC, 644  
 Patten R, 1055  
 Pechar C, 879  
 Pedersen BK, 572  
 Peeples JM, 586  
 Peers KF, 556  
 Peerson J, 1025  
 Pellett PL, 1203S  
 Pellier P, 1362  
 Pencharz PB, 659  
 Peng Y-M, 636  
 Peng Y-S, 636  
 Penttilä I, 1310  
 Perez R, 1369  
 Perheentupa J, 985, 1297  
 Perkins D, 949  
 Perkins LL, 940  
 Peters EM, 132  
 Petersen BJ, 240S  
 Phillips RL, 1136S  
 Piccoli A, 675  
 Pietinen P, 161S  
 Pillon L, 675  
 Plawecik KL, 1238S  
 Plummer M, 245S  
 Podczasy JJ, 861  
 Poehlman ET, 1286  
 Poggi F, 1332  
 Potter JD, 612  
 Poulter C, 66  
 Poulter N, 66  
 Prentice AM, 135, 477S, 619  
 Prince M, 1083  
 Prior JC, 92

Raben A, 350, 786S, 789S, 1386  
 Rahman MM, 5  
 Rambaud J-C, 1362  
 Ranganathan S, 879  
 Ransom TPP, 1055  
 Rao AV, 706S  
 Rasmussen LB, 572  
 Ravussin E, 800  
 Read NW, 87  
 Reddy S, 1176S  
 Reece EA, 465S  
 Reed JA, 1197S  
 Reid TMS, 70  
 Reina JC, 20  
 Remer T, 1356  
 Reo NV, 547  
 Reynolds HR, 423  
 Riboli E, 245S  
 Richter EA, 572, 789S  
 Riddle M, 1083  
 Riemersma RA, 949  
 Rigalleau V, 663  
 Riley P, 218S  
 Rising R, 800  
 Rissanen J, 1277  
 Ritchie J, 1060  
 Rivera C, 1369  
 Roberts DCK, 419  
 Roche AF, 547, 810  
 Rodger NW, 1265  
 Rongier M, 1395  
 Roseman JM, 940  
 Rosen, 1275  
 Ross AC, 922  
 Rossi B, 675  
 Ross R, 1277  
 Ross SA, 1265

## AUTHOR INDEX

Royall D, 325, 884  
 Rozen R, 560  
 Ruckdeschel G, 428  
 Rufolo P, 900  
 Rush D, 511S  
 Russell JD, 98  
 Russell ME, 847  
 Russell RM, 1094  
 Ryan EA, 1265

Salamone LM, 80  
 Salmenperä L, 985  
 Saltin B, 790S  
 Samuelson G, 600  
 Sánchez M, 1000, 1012  
 Sanders TAB, 1176S  
 Sandström B, 371, 935  
 Sarkkinen ES, 364, 1310  
 Sauberlich HE, 940  
 Saudubray JM, 1332  
 Sauer PJ, 659  
 Savaiano DA, 1021  
 Saveny C, 787S  
 Sayegh RA, 0026  
 Sbai D, 1332  
 Scanlin TF, 123  
 Schaefer EJ, 32  
 Scheppach W, 428  
 Schiano TD, 1270  
 Scholl TO, 492S  
 Schultink W, 433  
 Schwab U, 1310  
 Schwartz J, 110  
 Schwertner HA, 1093  
 Scragg R, 1040  
 Selenius M, 792S  
 Selhub J, 1033  
 Sevak L, 1069  
 Sever P, 66  
 Shah M, 980  
 Sharpe DN, 929  
 Sharpe SJ, 929  
 Shaw KD, 1277  
 Shike M, 1270  
 Siders WA, 578  
 Siervogel RM, 547, 810  
 Sievert YA, 275S  
 Siimes MA, 985, 1297  
 Sinha R, 232S  
 Siru OH, 841  
 Smith BM, 1242S  
 Smith D, 1033  
 Smith JM, 659  
 Smith RM, 1045  
 Smith U, 686S  
 Snyder G, 900  
 Snyder J, 1409  
 Soeno N, 409  
 Solomons NW, 134, 952, 1369, 1369  
 Sonko BJ, 619

Sowell AL, 891  
 Spaaij CJK, 42, 827  
 Specker BL, 484S, 593, 1182S  
 Spiegelman D, 1025  
 Spraul M, 800  
 Spurr GB, 20  
 Stallings VA, 123  
 Stamler J, 146S  
 Stanko RT, 423  
 Staten LK, 20  
 Steen B, 773S  
 Steephen AC, 1270  
 Steinmetz KA, 612  
 Stenling R, 389  
 Stewart PM, 98  
 Stirton C, 612  
 Stolarczyk LM, 964  
 Stumbo PJ, 833  
 Suarez FL, 1021  
 Sundberg B, 780S  
 Sun DM, 869  
 Sundram K, 841  
 Sunkin ME, 861  
 Suter PM, 1094  
 Svardal AM, 631  
 Swyer PR, 659  
 Szostak WB, 273S

Tan MH, 1265  
 Tepper PG, 1045  
 Tholstrup T, 371  
 Thomas DE, 791S  
 Thomas TR, 28  
 Thompson GN, 1332  
 Thompson LU, 706S  
 Thom S, 66  
 Thomsen BL, 600  
 Thouvenot P, 778S, 781S, 782S  
 Thuillier F, 1395  
 Toborek M, 60  
 Tolley EA, 586  
 Tomabechi K, 409  
 Tomezsko JL, 123  
 Toohey ML, 103  
 Tosca MA, 869  
 Toubro S, 350, 775S, 786S  
 Tovar J, 699S, 777S, 783S  
 Traber MG, 1270  
 Tremblay A, 975  
 Truswell AS, 710S, 1418  
 Tsay RH, 1000, 1012  
 Tullus K, 792S  
 Tylavsky FA, 1197S

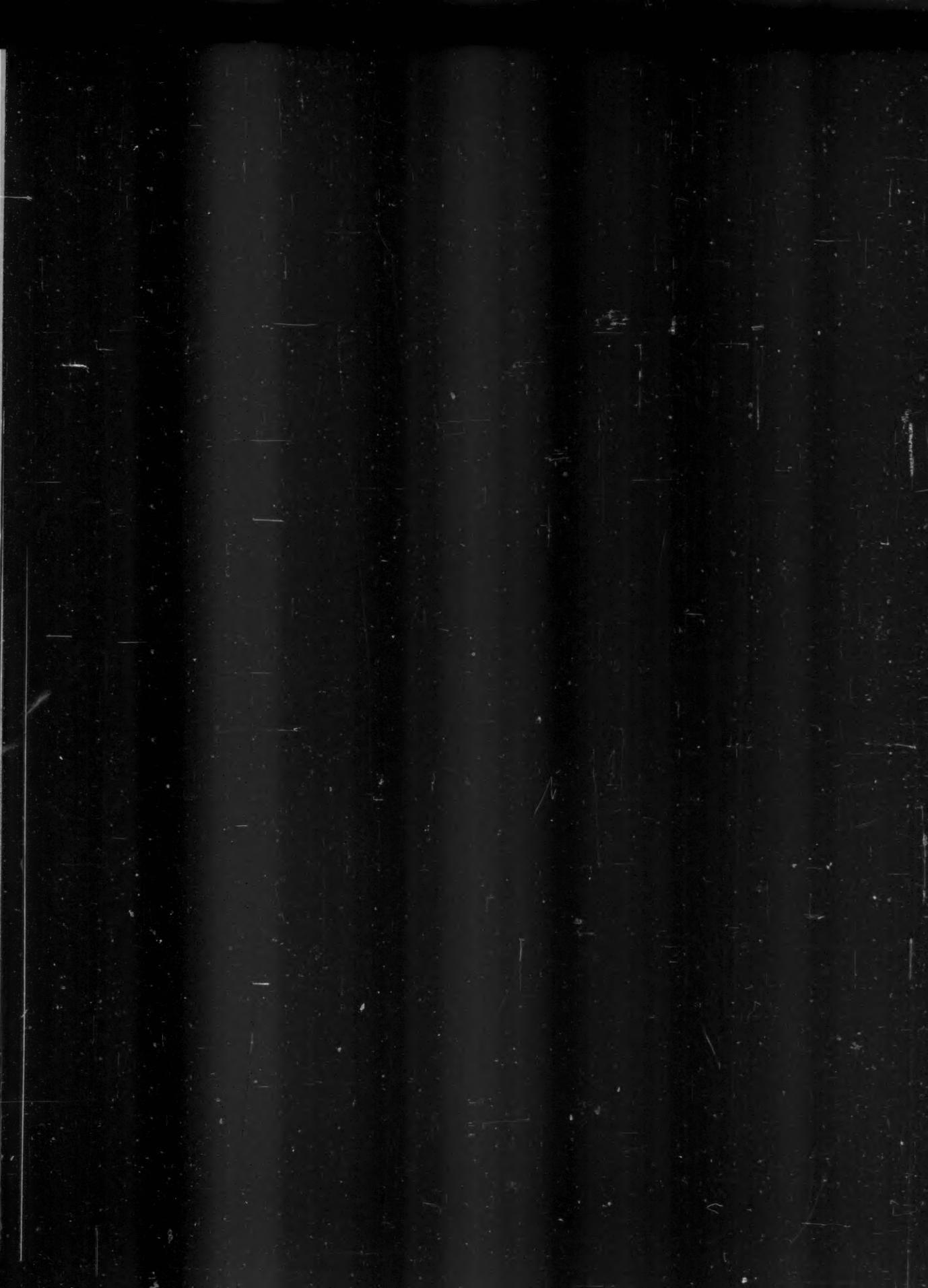
Ueland PM, 631  
 Umegaki K, 409  
 Underwood BA, 517S  
 Usutupa MIJ, 364, 753S, 1310

Van Aerde JE, 659  
 van Amelsvoort JMM, 626, 784S  
 van der Haar F, 1415  
 van der Heide D, 827  
 van der Heijden LJM, 42, 827  
 van der Wielen RPJ, 221S  
 van de Ven MLHM, 619  
 Vandongen R, 1060  
 Vanhanen H, 356  
 van Munster IP, 626  
 Vann JW, 891  
 van Raaij JMA, 42, 827  
 van Staveren WA, 221S, 245S, 1187S  
 Varricchio G, 1291  
 Varricchio M, 1291  
 Vessby B, 115, 667, 742S, 794S  
 Veum TL, 649  
 Victor OJ, 10  
 Vieira NE, 593  
 Vigna YM, 92  
 Vizzard J, 98  
 Vuksan V, 706S  
 Vuoristo M, 1325

Wahlqvist ML, 949, 950  
 Wall KM, 1317  
 Walsh MJ, 1088  
 Walter RM, 654  
 Waslien CI, 20  
 Waters DL, 419  
 Weaver CM, 1238S  
 Weigley ES, 129  
 Weiss KM, 847  
 Weiss ST, 110  
 Wellens R, 547  
 Werkman SH, 586  
 West CE, 1415  
 Western P, 350  
 Weststrate JA, 784S  
 Whatley JE, 1088  
 Whorton JC, 1103S  
 Wilkens LR, 1985  
 Willett WC, 401, 171S, 1162S  
 Wittes J, 861  
 Wolever TMS, 706S, 1055, 1265  
 Wolf R, 423  
 Würsch P, 758S

Yamanaka WK, 612  
 Yang H, 1403  
 Yan H, 908  
 Yerger AL, 593  
 Young E, 566  
 Young VR, 1000, 1012, 1203S, 1347  
 Yousef KA, 1045

Zantos D, 80  
 Zhang J-X, 389  
 Zidenberg-Cherr S, 532S  
 Zito CA, 413



THIS PERIODICAL MAY BE COPYRIGHTED, IN  
WHICH CASE THE CONTENTS REMAIN THE PROPERTY  
OF THE COPYRIGHT OWNER. THE MICROFORM  
EDITION IS REPRODUCED BY AGREEMENT WITH  
THE PUBLISHER. DUPLICATION OR RESALE WITHOUT  
PERMISSION IS PROHIBITED.

UNIVERSITY MICROFILMS INTERNATIONAL,  
ANN ARBOR, MICHIGAN